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ORIGINAL ARTICLES.

PATHOLOGICAL SPECIMENS, WITH ACCOMPANYING HISTORIES.

Presented before the Medical Society of the District of Columbia, May 21, 1889.

BY JOSEPH TABER JOHNSON, M.D.,

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[Reported for THE JOURNAL.]

Case 1.—Ovaries and tubes from a white lady, æt. 34; no children, though she had been married fourteen years. History of pelvic pain and chronic invalidism for nearly twenty years. Had undergone much treatment by many physicians in different cities without benefit, and was now nearly worn out. Upon examanination, found enlarged ovary on one side and an adherent mass on the other, such as usually passes for pelvic cellulitis. Dr. J. recommended immediate removal of diseased organs. Patient was delighted at a definite proposition to do something, and she entered his private hospital for that purpose. Appendages upon both sides removed; ovary upon right side was as large as his fist, and contained blood and pus. Appendages upon left were densely matted together and adherent to anything they touched. Recovery has been perfect. It is now a year since the operation, and Mrs. S. is in perfect health.

Case 2.—Mrs. D., æt. 32; white, wife of a clergyman; mother of seven children; had been an invalid for ten years; confined to her room for last three years, and to her bed for past year; sent to him by Dr. Stuart Harrison, of Anncostia. One ovary very much enlarged; condition very similar to Case No. 1. Same operation and same result; done in his private hospital. Returned six months later with pains in the rectum and pelvis; pelvic pains relieved by galvanic current. Dr. P. S. Wales, late Surgeon-General U. S. Navy, saw her with him, and discovered a fissure of the anus, which he completely cured by thoroughly dilating the sphincter under ether.

Case 3.—Enlarged tubes with ovaries, from a case of pyo-salpinx, in a single colored girl, æt. 28 years. Had been a great sufferer for some years; referred to Dr. J. by Dr. Mary Parsons. Operated in private room in Providence Hospital. Rapid recovery, and continues well; gained thirty-five pounds in last six months.

Case 4.—Ovaries and tubes from Mrs. W., a widow, aged 36, who was suffering from a bleeding uterine myoma; had treated her three months with ergot and electricity without effect, except to tone up her system somewhat; was employed by the Government, but lost her place on account of continued absence; was unable to work, and had to be supported by friends. Operated last January. Patient is now well; has lost no blood since the removal of appendages in Providence Hospital.

Case 5.—Ovarian cyst nineteen pounds from Miss R., aged 23. White; single; sent by Dr. Chapman, of Glymont. Operated in his private hospital February 14, 1889, when her temperature was 103°, pulse 130°, and respiration 40°. Complete and immediate relief; no bad symptoms during recovery, except from slight stitch-hole abcesses; is now at home, and perfectly well.

Case 6.—Blood-clots, ovary and tube from Mrs. B., who was operated on for symptoms resembling extra-uterine pregnancy. Saw her first with Dr. Fry; patient suffered with constant pain and bloody discharge; had a mass in left iliac fossa, resembling a fibroid; pain and tenderness increasing, and evidence of pus developing. Dr. Fry had her removed to Dr. Johnson's Private Hospital, where she was operated on four months ago. A large abscess of left ovary was opened; a pint of very offensive pus was evacuated; cavity washed out and drained; drainage tube remained in two weeks, and gave exit to much offensive fluid. More than a handful of large, blackish blood-clots came out of the abdomen, and from their size and age were supposed by Dr. Johnson to be portions of placenta; but Dr. Gray, of the U. S. Medical Museum, reports them to be old coagula. Patient had been in bed eleven weeks when operated on. She now reports herself as perfectly well. The other ovary was not disturbed.

Case 7.—Two enlarged ovaries and tubes from Miss G.; white; æt. 23; single; has been a sufferer for ten years; was sent to him by Dr. Bayne, who had treated her for several years for menstrual epilepsy and painful periods. Had been under Dr. Johnson's care four years. He had fre-

quently urged her to have her appendages removed. They were known to be enlarged—in a state of chronic inflammation and adherent. After one of her attacks of convulsions, her bladder lost its power to contract, and for three years and five months her water was passed only through a catheter, which she finally used for herself. Under the frequent and prolonged use of the faradic current, she regained the power to empty her own bladder. Last fall she had a pelvic peritonitis, which kept her in bed over a month. The left ovary began to enlarge very rapidly, and kept her house-bound. She entered Dr. Johnson's Private Hospital in January, and was operated on. One ovary was as large as a child's head, and contained over a pint of offensive pus. The other was as large as a lemon. The patient made a slow recovery, and left the hospital in six weeks. Being septicæmic when operated on, she has done fairly well. She is now going about, and has gained at least twenty-five pounds, and expresses herself as being a new creature.

Case 8.—Large ovarian cyst, from a white married lady, æt. 61 years. Tumor had been growing less than a year. Patient had been confined to her room for a month with typhoid symptoms. Pulse about 100°, but temperature ranging from 100° to 103° every evening; tongue very brown and dry. Was removed from a boarding-house to Dr. Johnson's Private Hospital, and operated three days later. Third day after removal of tumor, symptoms all disappeared. She made an uneventful recovery, and left the hospital in five weeks. She is now perfectly well. Tumor weighed 26 pounds; was sent to Dr. J. by Dr. Gardner.

Case 9.—Supra-vaginal hysterectomy. Uterus, tubes and ovaries removed, with a fibroid tumor weighing four pounds. Saw the patient with Dr. Bromwell about three weeks ago, when she was suffering acutely with symptoms of intestinal obstruction. Dr. B. had attended her for a week, and had been unable to cause a movement of her bowels. Had been compelled to administer many hypodermic injections of morphia to quiet her agony. Her abdomen was enormously distended with gas; her temperature was about normal, but her pulse had been 120° for three days. Dr. Johnson had seen the patient over a year before in consultation with several physicians, in reference to the removal of a fibroid tumor of the uterus. The patient was anxious for an operation, but three out of five doctors were opposed to its removal, and a course of electrical treatment was recommended. This was continued for about four months without any marked benefit under the skilful management of Dr. McArdle. Patient had suffered in the meantime from attacks of indigestion. Upon a vaginal examination the fibroid was now found to be entirely filling the pelvis, and Drs. Johnson and Brownwell thought the tumor was the cause of the intestinal obstruction, and that its immediate removal offered the only hope of her relief. Though there was great distention of the abdomen, constant vomiting, and a pulse of 120, yet with a temperature at about 99, it was thought that there was little or no peritonitis. The patient and her family were ready and anxious for an operation. It was decided on at noon, and done at 4 P.M. The only difficulties experienced in the operation were in keeping the distended intestines from escaping, and in getting the tumor out of the pelvis. It was finally drawn up with Tait's corkscrew pulling it, while two fingers in the vagina pushed it above the brim of the pelvis. There were no adhesions except to the sigmoid flexure, which was completely flattened out. Keath's clamp was applied at about the internal os, and the tumor cut away; pedicle treated externally, and the wound closed in the usual way. It was thought that the removal of the tumor would remove the obstruction, and no extensive search was made for any other trouble. Patient was very much more comfortable after the operation, and frequently expressed herself as being free from pain. Operation was done on Sunday. The difficulty was not relieved, and she died on Thursday of intestinal obstruction. The autopsy showed everything very satisfactory about the operation, but revealed a tight constriction of the colon at the point where the transverse merges into the descending colon, in which was a perforation large enough to admit the big end of a lead-pencil. Considerable intestinal contents had escaped. About six inches of the gut was removed, and with the tumor was presented to the Army Medical Museum. Upon examination, Dr. Billings reports the obstruction to be "cancer of the intestine." We have the sad consolation, therefore, of knowing that her life could not have been saved by any operation short of a resection of the intestine, and the malignant deposit was not discovered until the autopsy.

Case 10.—Supra vaginal hysterectomy. Soft, rapidly-growing myoma of the uterus, weighing 20 pounds, removed from Miss E.; white; æt. 31. First noticed an enlargement four years ago; had only been troublesome for about a year; was anxious to have it out. Operated in Providence Hospital. Many and very vascular adhesions about upper part of tumor, and to the omentum. Some of the vessels were as large as index finger. Kœberly's *serre neud* applied to pedicle, and treated as recommended by Bantock. Later: patient has made a good recovery; has a normal pulse and temperature; is now in her twenty-fourth day.

Case 11.—Tubes and ovaries from Miss B., æt. 24; white; a seamstress, who was prostrated on account of loss of blood from a bleeding uterine myoma the size of a large cocoanut. Had been in the Homeopathic Hospital off and on for about

three months; was entirely supported by kind friends. Operation had been a complete success. She has written him this week that she feels better and stronger and happier than at any time for a year past.

Case 12.—Cancer of the ovary, large as a child's head. Was operated on in Dr. Johnson's private hospital. Fluid collection in abdominal cavity, mistaken for a cyst. Upon disturbing the mass, it began to bleed, and the only way to arrest hæmorrhage was to ligate and remove it. Cavity irrigated with hot water, and drainage tube put in. Recovered from the operation, and went home in five weeks, probably to die soon from an extension of the cancerous disease.

Case 13.—Large ovary and part of tube removed from Mrs. S. two months ago; had been confined to bed two months previous to operation on account of agonizing attacks of pain. She gave the history of a miscarriage in the sixth week, and much of her sufferings and frequent bloody discharges from the uterus were attributed to her own bad management. It was supposed that the fœtus had escaped, and that portions of sedundines still remained. Upon examination, the uterus seemed to be enlarged, retroverted, and exquisitely tender. So much pain was given by pressure that several of the physicians who had attended her were unable to make a satisfactory examination. I saw her with Dr. J. R. Bromwell about ten weeks ago, and after learning the history and examining the patient as well as we could, were divided in opinion as to whether we had an enlarged uterus or an extra-uterine pregnancy to deal with. Her terrible attacks of pain and the bloody discharges from the uterus caused us to think the latter condition might be present. It was decided finally to etherize her—dilate the uterus and remove anything abnormal which we might find in the cavity. This was done a week later, and the uterus was found to be only slightly enlarged and entirely empty. Upon the left side, however, we found a mass the size of one's fist, which had been mistaken for the enlarged and retroverted fundus uteri. Its very great tenderness had prevented manipulation, and it was not until she was etherized that we could determine that the mass was not the uterus. Just exactly what it was no one could yet say, but it was believed to be an enlarged ovary with an enlarged tube on its upper surface. It might be extra uterine pregnancy. While our diagnosis was not certain, our opinion was that this enlargement was the cause of all her trouble, and that it ought to come out. A week later the abdomen was opened and Dr. J. removed the left ovary, which was larger than a lemon. It was very black and very soft. In enucleating the ovary from its bed of attachments, half a pint of black blood-clots welled up into his hand, and were guided out of the cavity. The abdomen was thoroughly irrigated, a drainage-tube put in, and the incision closed. The patient has made a good recovery. Am inclined now to think it was extra-uterine pregnancy, though Dr. Lamb says it is only blood-clots. Several of Mrs. S.'s family had died of cancer, and the fear of malignancy made the patient and her family more ready for an early operation. Mrs. S. vomited constantly for six days after the operation, and was only nourished through the rectum. This caused no pain and no rise in pulse or temperature. She has a good appetite and digestion. She has gone to Atlantic City for the summer.

ON THE DIAGNOSIS OF PREGNANCY IN THE EARLY MONTHS.

Read before the Medical Society of the District of Columbia, January 30, 1889.

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In speaking of the diagnosis of pregnancy in the earlier months, I desire to state that I refer to the time previous to the appearance of the positive signs, or, in other words, previous to the fourth month. The subject is one of very great importance, both to the patient and to the medical man, for upon his decision will rest, in many cases, the domestic happiness of families, especially when considered with reference to the younger female members. An error in diagnosis can never be remedied, for it matters not whether we pronounce for or against pregnancy and the final outcome of the case be different from our prediction, the error will live long after the case has been forgotten by the physician. It is this possibility of injuring our reputation that makes the subject of so much greater importance and demands that medical men should be conversant with all the signs of pregnancy, presumptive, probable, and positive. When a married woman desires to know whether or not she is pregnant, she will freely confide her symptoms to her physician, knowing that this is the only way for him to form a positive opinion, even allowing the vaginal examination, but how different is it, as we all know, when a young woman has fallen from virtue, becomes pregnant and seeks treatment for a suppression of the menses and a nausea and sick stomach in the morning. In such a case there is frequently the greatest difficulty in forming a diagnosis, for she will deny all symptoms, she will admit nothing, and assume the rôle of injured innocence when closely interrogated as to her habits, protesting all the while that the suppression is but the result of exposure to the cold and wet; that she never was regular; that her appetite and digestion never were good; that she has backache, which is always a premonitory symptom with her of the approach of the menstrual period. Now what excuse could we

have for proposing an examination of the breasts, an inspection of the vagina for its discoloration, an examination of the cervix, an application of the thermometer, or an examination for Hegar's shortening of the neck, in a case of this kind? Our suspicions might make us anxious to apply any or all of these tests, but the patient would refuse to see the necessity of it and seek advice from some one who would not ask "impertinent questions." In a case like this the pulse rate is, in my opinion, the most reliable sign, for its application requires neither exposure nor vaginal examination, it is simple, and is a sign not generally known to women, and will guide us in our further disposition of the case.

Let us see what are the signs of pregnancy in the earlier months, previous to the positive signs of this condition, that is to say, previous to the end of the fourth month.

The first sign of pregnancy is the suppression of the catemenia, then follows a bilious attack, a disordered state of the stomach, with nausea and vomiting, vesical tenesmus and irritability, kyesteine in the urine, salivation, changes in the mammæ, flattening of the abdomen, softening of the cervix uteri, depraved appetite with longings, violet discoloration of the mucous membrane of the vagina, and descent of the uterus.

We must remember that the probable and presumptive signs of pregnancy may or may not be the result of gestation; that they may be the effects of various morbid conditions of the uterus or other organs of the system, with which pregnancy has no connection, and that the positive signs are evidences of undoubted value.

In regard to the suppression of the menstrual discharge, suppression may result from other causes; newly-married women sometimes skip two or three months and then become regular, again it may not be suppressed at any time during the gestation. I have seen it occur three successive months after impregnation. The vomiting and nausea may follow from other causes. Depraved appetite and longings for various articles of diet are reliable signs. I have known cases in which enormous quantities of starch have been consumed by the patient. The breasts begin to change about the second month, the nipple becomes more sensitive, projects, swells, and assumes a darker color; the areola is completed about the fourth month.

Neuralgias, hysteria, syncope, a sensation of increased bodily heat, dizziness, change of disposition, headache, occasional rigors, pigmentation and swelling of the face, together with various nervous derangements, very frequently occur.

Kyesteine has been found as early as the fifteenth day, and frequently at the second month, but its presence is most characteristic from the third to the sixth months, and diminishes from the seventh month.

Chloro-anæmia may result from the disordered gastric function and the altered condition of the blood, to improve after the fourth month. At from three to three and a half months, the abdomen begins to regularly and permanently enlarge. The vaginal mucous membrane becomes discolored, assuming a blue or violet color, as this may be found in all cases in which there is a predisposition to a vascular condition of the genito-urinary apparatus it loses its importance as a diagnostic sign. The uterus retains its normal position during the first three months, but the fundus rises as the organ enlarges, while the neck and inferior part subside more towards the floor of the pelvis. This I take to be the principle of Hegar's shortening of the neck of the uterus. At the fourth month the uterus may be felt three or four fingers' breadth above the pubis. The lips of the os uteri begin to soften towards the end of the first month; at the fifth month the cervix diminishes, to be gradually obliterated at the end of term.

M. Larcher, in 1828, and again in 1857, called attention to the hypertrophy of the heart, and M. Blot has confirmed his observations. This hypertrophy, like that of the uterus, passes away after

TABLE OF CASES.

No.	Period Missed.	Date of Examination.	Pulse. Standing.	Pulse. Sitting.	Pulse. Lying.	Diagnosis.	Remarks.
1	August 2, 1884	August 27, 1884	72	76	74	Pregnant.	Delivered
2	May 15, 1884	May 20, 1885	84	86	88	"	" Jan'y
3	May 17, 1885	August 25, 1885	84	86	88	"	Abortion Sept.
4	May 25, 1885	August 25, 1885	98	102	98	"	" June
5	June 17, 1885	June 20, 1885	64	68	64	"	" March
6	January 18, 1886	January 23, 1886	96	100	96	"	Delivered
7	August 15, 1886	August 22, 1886	94	100	94	"	"
8	November 8, 1886	November 12, 1886	92	92	92	"	"
9	October 23, 1886	October 26, 1886	96	100	96	"	"
10	April 4, 1887	June 23, 1887	92	96	96	"	Abortion Feb'y
11	March 15, 1887	March 22, 1887	74	76	74	"	Delivered
12	May 19, 1887	May 29, 1887	80	84	82	"	"
13	November 26, 1887	December 5, 1887	74	78	72	"	"
14	September 17, 1887	December 26, 1887	94	94	94	"	"
15	December 14, 1887	January 3, 1888	66	66	66	"	"
16	March 18, 1888	April 2, 1888	92	96	92	"	Under observat'n*
17	August 12, 1888	September 2, 1888	85	82	86	"	Abortion Dec.
18	August 12, 1885	September 15, 1888	84	84	86	"	

* Delivered May 1.

delivery. J. Braxton Hicks has published several articles in which he places great faith in the uterine contractions which occur throughout pregnancy, at a time varying from three to twenty minutes and continuing for a space of three to five minutes. I place reliance upon the pulse test, Jorissenne's sign, and have employed it for the past seven years, in a great number of cases.

There can be no possible objection raised to counting the pulse, and the result has removed all doubts in those cases in which I have employed it.

The diagnosis by Hegar's sign, by the thermometer, or by the softened condition of the os uteri, I have not been able to practice sufficiently to draw any satisfactory conclusions, as in each of the cases I have been controlled by the pulse test.

The principal object of this paper is to call attention to the value of the pulse test in those cases where much professional tact is required to solve the question of pregnancy. The following may be cited as a few of the cases in which I have applied this method of diagnosis:

The value of the pulse test consists in the sameness, or very little variation in the number of the radial pulsations, and while it is not infallible it possesses enough certainty to give it a place in the positive signs in forming the diagnosis of pregnancy. According to Jorissenne's article published in the "Ann. Soc. de med-chir de Liege," vol. xxi, he has employed this sign since 1878, and some of the particulars of his cases are most conclusive. He refers to an article of H. Schapiro, published in Russian, in 1881, but I have seen neither the article nor the review of it which was published March 4, 1882, in the *Centralblatt für Medecinischen Wissenschaften.*

AN INTRODUCTION TO THE STUDY OF PNEUMONIC FEVER.

BY EDWARD F. WELLS, M.D.

SEVENTH PAPER—PREVALENCE.

AGE.

From the cradle to the grave—from the earliest infancy to the greatest age—man is liable to attacks of pneumonic fever. The newly-born babe, the prattling child, the rollicking boy and winsome girl, the bashful youth and demure maiden, the man in his strength and his mate in her loveliness, the sedate of both sexes as they descend the decline of life, and the aged totterers upon the brink of the grave; all furnish victims to this devouring enemy of mankind.

Although no age is exempt, yet the disease is met with much more frequently at some periods of life than at others. During early childhood pneumonic fever finds easy and exceedingly numerous victims. From 5 to 20 years of age the mortality sinks to its lowest level. From 20 to 40 years the proportion is increased somewhat,[1] to be again considerably augmented during the next score of years.[2] Old age comes on with a large—the largest—and increasing prevalence.

[1] Green, in Quain's Dic. Med., N. Y., 1883, p. 874, says that it is extremely frequent at this period, but this opinon is at variance with my statistical investigations.

[2] See Cullen, Prac. Phys., Phila., 1792, Vol. i, p. 182.

Grisolle[3] says that it is "a disease very frequent from infancy to 20 years of age, . . comparatively frequent from 20 to 40, less so from 40 to 60,[4] and very frequent, and also very fatal, after 60 years of age."

Whether or no this malady is common in infancy has been a strongly controverted point by different writers.

Swett,[5] Weber,[6] Fox[7] and others[8] say that the disease may even attack the fœtus *in utero*, and Hayne[9] has recorded the particulars of such a case.[10] It is perfectly well established that infants in the very earliest hours or days of life may be so attacked.[11] A fine example of pneumonic fever in an infant 15 days old, subjected to autopsical examination, is recorded by Smith.[12]

In the spring of 1875 a male and a female child, twins, aged 3 weeks, were suddenly attacked with a short, hacking, and apparently painful cough, extreme shortness and rapidity of breathing, and elevation of temperature. They failed rapidly and died, one on the morning and the other during the afternoon of the third day. At the autopsy the pleuræ of both were inflamed, coated with recent lymph, and their cavities contained a quantity of flaky and yellowish serosity. In both were patches of consolidation throughout both lungs. In one of the children the cerebral membranes were intensely congested, with minute points of extravasation in the pia mater.

Another fatal case came under my notice in 1879, in which the patient was only 1 week old. A post-mortem examination was not allowed.

Juergensen[13] states that at least three-fifths of all the cases of pneumonic fever occur between the ages of 1 and 14 years. Laennec[14] says that children are "very subject to the disease, and the

[3] Traité de la Pneumonie, Paris, 1841.

[4] This statement is erroneous.

[5] Diseases of the Chest, N. Y., 1854, p. 79.

[6] Path. Anat. d. Neugeb. u. Säuglinge, Bd. ii, S. 41.

[7] Reynolds' Syst. Med., Phila., 1880, Vol. ii, p. 190.

[8] Reuse, Lungeneutzündung, Leipsic, 1861, S. 78; Weber, Path. Neugeb.

[9] Am. Jour. Med. Sci., July, 1870, p. 222.

[10] Forster, Handb. d. Path. Anat., Bd. ii, S. 248, thinks such cases especially prevalent in the course of epidemics of puerperal fever—the poison of which may be absorbed ante-partum and affect the fœtus. Such cases are usually fatal a few hours after birth. See Fox, l. c, p. 190.

[11] See Valleix et Vernois, Mal. des Enfants, Paris, 1838, T. ii, p. 256; Condie, Am. Jour. Med. Sci., July, 1870, p. 222; Bouchet, Diseases of Children, London, 1855, p. 325; Chomel, Pneumonie, Leipzig, 1841; S.141; Gerhard, Dis. Chest, Phila, 1860, p. 218; Barthez et Rilliet, Mal. des Enfants, T. i, p. 108; Guersent, Dic. de Méd., T. viii, p. 76; Williams, Cycl. Prac. Med., Vol. iii, p. 406; Laennec, Traité de l'Auscultation Mediate, Paris, 1819, p. 547; Juergensen, Ziemssen's Handb. d. Spec. Path. u. Therap., Bd. v, S. 21; Gunsburg, Klinik d. Kreislaufs u. Athmungs Organe, Breslau, 1856; Copeland, Med. Dic., N. Y., 1855, Vol. ii, p. 890; Ziemssen, Pleuritis u. Pneumonie bei Kindesalter, Berlin, 1862, S. 155; Sturges, Nat. Hist. Pneumonia, London, 1875 p. 124; Lombard, Arch. Gen. de Méd., January, 1831; Baginsky, Pneumonie u. Pleuritis, Tüb., 1880, S. 3; Jörg, Handb. d. Kinderkrankh., 1836; Seiffert, Bronchopneumonie d. Neugebornen, Berlin, 1837; Steffen, Klinik d. Kinderkrankh,, 1865; Rautenberg, Jahrb. für Kinderkeilk., 1875, Bd. viii; Gerhard, Kinderkrankh., 1871; Henoch, Kinderheilkunde, Berlin, 1868, Bd. ii, S. 150; Steiner, Kinderkrankheiten, 1873; Pause, Lungeneutzundung, Leipzig, 1861, S. 64; Friedleben, Arch. f. Phys. u. Heilk., 1874; La Roche, Pneumonie, Phila., 1854, p. 423; Billard, Mal. des Nouv.-Nés, Paris, 1833; Forbes, Trans. Laennec, Dis. Chest, N. Y., 1830, p. 226; and a great many others.

[12] Med. Gaz. (N. Y.), May 26, 1883, p. 243.

[13] Berliner klin. Wochenschr., 1884, Nr. 17.

[14] Dis. Chest, N. Y., 1830, p. 226.

more so the younger they are." Audral[15] affirms that "children are particularly prone to attacks of this malady, . . it being one of the most powerful causes of the mortality of early life." Guersant[16] was of the opinion that "three-fifths of the children that die in the hospitals of Paris between birth and the conclusion of the first dentition die of pneumonia." Gerhard[17] says that few children die without pulmonary inflammation.

Lombard[18] says: "From the first to the eighth day of life pneumonia constitutes seven-tenths of all the sickness, and one-sixth of the deaths are caused by this disease. As the function of the lungs is better established there is a falling off in the number of cases. In the second week pneumonia constitutes two-ninths of the sickness. Beyond the third week there is a considerable diminution in the proportion of cases. Between 6 weeks and 2 months it causes two-ninths of all sickness. From 2 to 6 months only one-tenth, but afterwards the ratio increases again. From 1 to 2 years it causes one-third of all sickness. From 2 to 6 years the proportion falls to from one-fourth to one-fifth. From 6 to 8 years it is a trifle greater. Between 8 and 11 years the proportion sinks to between one-fourth and one-sixth. In the twelfth year pneumonia is more frequent than in the immediately preceding or following years."

Of 608 cases analyzed by Louis,[19] 206 were under 18 years of age, 118 from 18 months to 14 years, and 284 from 14 to 83 years.

That the disease, contrary to the opinions of some,[20] is a very common one in early life, is also proved by the following facts gleaned from registration reports:

Of 1,553 deaths from pneumonic fever in Manchester, Liverpool and Birmingham in 1839, 1,131, or 73 per cent., were under 5 years of age. Of 25,145 deaths from this cause in England in 1866, 17,460, or 69.4 per cent., were below the age of 5. Of 2,228 deaths from this disease in New York City in 1878, 1,134, or 54 per cent., were under 5 years of age. Of 60,675 deaths from this malady reported in twelve large American cities during recent years, 23,895, or 40 per cent., were below the age of 5. During a series of nineteen years in Massachusetts, twenty-four years in Vermont and fifteen years in Rhode Island, there were 46,563 deaths from pneumonic fever, and of these 17,284, or 37 per cent., were under 5 years of age. In the years 1883-4-5, in Ontario there were 3,797 deaths from this cause, 1,330, or 35 per cent., of which were under 5 years of age. In the United States, in 1880, there were reported for analysis 63,079 cases of this disease, 19,004, or 33 per cent. of which were children under the age of 5 years.[21]

Reasoning from these statistics we are safe in estimating that at least one-third of all fatal cases of pneumonic fever are children under the age of 5 years.

It has been asserted that children are now more susceptible to pneumonic influences than formerly, but its more frequent appreciation in recent years is probably due to our improved diagnostics.

Thus, in the Vienna Institution for Children this disease was said to constitute but 2.3 per cent. of the total sickness at the beginning of this century,[22] whilst fifty years later the proportion had risen to 7 per cent.[23]

In this connection the difficulties of diagnosis in infantile pneumonic fever must not be underestimated. For an accomplished diagnostician these are by no means trifling, and we know only too well that, unfortunately, all persons who are by law empowered to write certificates of death are not of this class. There can be no doubt that a considerable number of children who are reported as having succumbed to "teething," "convulsions," "worms," "cerebral disease," etc.,[24] would be found to present the evidence of pneumonic inflammation were they subjected to necropsical examination. These remarks apply equally to many aged persons reported as dying from "coma," "cerebral disease," "apoplexy," "debility," etc.

These circumstances vitiate, to a certain extent, the value of all public mortality statistics. Hospital returns are but little more reliable, inasmuch as all ages do not alike frequent them.

Pneumonic fever attains its greatest prevalence in those who have passed the meridian of life.[25]

Loomis[26] is of the opinion that fully 90 per cent. of the deaths of persons over 65 years of age are caused by this malady; in this, however, he is clearly in error, probably from trusting to individual impressions, rather than to statistics.

At the Soldiers' Home in Dayton 48 per cent. of all deaths in patients over 70 years of age are from pneumonic fever.[27]

Humphrey[28] records a successful case of this disease in a female 104 years of age, and Lœber[29] one in a man of the great age of 110 years. In the United States in 1880, seventy-nine persons over 95 years of age died from this malady.[30]

[15] Med. Clin., Phila., 1843, Vol. ii, pp. 183, 203.
[16] Dic. de Méd., T. viii, p. 96.
[17] Am. Jour. Med. Sci., Vol. xiv, p. 328.
[18] Arch. Gén. de Méd., January, 1831.
[19] On Phthisis, Boston, 1836, p. 466.
[20] Morgagni, De Caus. et Sed. Morb.; Cullen. Prac. Physic., Phila., 1792, Vol. i, p. 182; Rufz, Jour. Con. Méd. Chir., 1834, p. 101; Smith, Dis. Lungs in Children, N. Y., 1881; Green, Quain's Dic. Med., N. Y., 1883, p. 874; Flint, Prac. Med., Phila, 1868, p. 180; Hewitt, London Lancet, N. Y., 1857, Vol. i, p. 156; Tanner, Diseases of Infancy and Childhood, Phila., 1871, p. 308; Wilbrandt, Inaug. Diss., Rostock, 1862; Huss, Lungenentzünd., Leipzig, 1861; and many others.

[21] No attempt has been made to embody all the available material on this subject.
[22] Gölis, Krankheiten d. Kindesalter, Wien., 1820.
[23] Ziemssen, Pneumonie u. Pleuritis, Berlin, 1862.
[24] One Cincinnati certificate bore the legend that "She dide with Liver dease & New Monei." See N. Y. Med. Rec., June 5, 1886, p. 668.
[25] See Quain, London Med. Jour., October, 1850; Day, Diseases of Old Age, London, 1849; Niemeyer, Spec. Path. u. Therap., Berlin, 1862, Bd. ii; Patton, Jour. Am. Med. Assoc., October 16, 1886, p. 425; Davis, Prin. and Prac. Med., Chicago, 1884; Hourmann et Dechambre, Arch. Gén. de Méd., T. xii; Grisolle, de la Pneumonie, p. 425; Fox, Reynolds' Syst. Med., Vol. ii, p. 186; and many others.
[26] Charcot's Diseases of Old Age, N. Y., 1881, p. 207.
[27] Patton, Op. cit., p. 425.
[28] N. Y. Med. Rec., October 23, 1886, p. 473.
[29] Lungenentzündung, etc., Dresden, 1771.
[30] U. S. Census Report, 1880.

The prevalence of pneumonic fever as influenced by age is shown by the following tables:

TABLE XVII.—SHOWING PREVALENCE OF PNEUMONIC FEVER BY AGES.

Morbility.

Authority.	Cases by Ages.									Tot.
	–5	5–10	10–20	20–30	30–40	40–50	50–60	60–70	70—	
Authors[31]	138	76	47	55	37	35	28	64	26	498
Barthez[32]	.	.	33	68	28	28	23	5	6	187
Bianchi[33]	.	2	295	489	299	209	128	92	43	1257
Chomel[34]	.	7	.	83	63	61	38	.	.	245
Doubleday[35]	.	.	21	88	60	41	18	16	2	248
Flint[36]	.	.	13	44	37	17	7	.	.	118
Griesolle[37]	.	.	84	190	117	107	84	37	11	630
Gunsburg[38]	.	.	1450	850	800	500	450	350	550	5000
Hasse[39]	.	.	299	1041	816	365	125	29	4	2616
Jurgensen[40]	116	55	22	71	43	27	29	29	13	330
Roth[41]	.	1	25	79	45	32	34	15	8	239
Schapira[42]	.	.	71	73	27	24	26	27	.	258
Waller[43]	.	.	20	31	9	9	8	4	.	72
Ziemssen[44]	95	68	23	.	.	.	.	.	.	186
Totals. .	349	222	2323	3106	2319	1446	998	668	655	12147
Per cent .	2.8	1.8	19.1	25.5	19.1	11.9	8.1	5.5	5.5	100.0

TABLE XVIII.—SHOWING PREVALENCE OF PNEUMONIC FEVER BY AGES.

Mortality.

Authority.	Deaths by Ages.									Tot.
	— 5	5–10	10–20	20–30	30–40	40–50	50–60	60–70	70 —	
[45]New York City, 1878. .	1234	74	41	116	161	178	172	153	159	2288
[46]Connecticut, 1866 . .	204	28	59	59	59	75	99	126	204	889
[47]Zürich, 1840, 45, 49, 50, 51	899	35	27	104	104	169	122	121	279	2461
[48]Massachusetts, 1863–81 .	13973	141	449	954	848	2986	3776	3497	3145	35339
[49]Rhode Island, 1865–79 .	1217	96	115	207	236	456	597	1078	1213	7013
[50]Ontario, 1883–85 . . .	1339	143	217	377	309	339	311	361	410	3797
[51]Cleveland, 1867	171	13	15	17	16	21	17	21	20	311
[53]United States, 1880 . . .	19004	2226	4734	6650	5564	5598	5777	6242	6996	63079
[54]St. Louis, 1885–86 . . .	338	31	40	92	95	105	113	86	64	1067
[55]California, 1884	35	1	9	12	26	34	17	22	10	166
Totals.	40550	4058	6002	9330	9321	10058	11044	11568	17814	120572
Per cent.	33.6	3.3	5.0	7.4	7.7	8.3	9.1	9.1	14.7	100.0

[31] Private Records.
[32] Wiener med. Wochenschr., 1857, S. 897.
[33] Med. Jahresb., 1879.
[34] Pneumonie. Leipzig, 1841, S. 316.
[35] N. Y. Med. Record, March 28, 1885, p. 342.
[36] Prac. Med., Phila., 1868, p. 180.
[37] Traité de la Pneumonie, p. 101.
[38] Klinik d. Kreislaufs u. Athmungsorgane, Breslau, 1856.
[39] Lungenentzündung, Leipzig, 1862, S. 74.

The relation which the mortality from pneumonic fever bears to that from all diseases at the same age is shown in table xix.[56]

TABLE XIX.—SHOWING PROPORTIONAL PREVALENCE OF PNEUMONIC FEVER BY AGES.

Mortality.

Age.	Ontario, 3 years.			U. S., 1880.			Zürich, 5 years.			Total.		
	All.	P. F.	%	All.	P. F.	%	All.	P. F.	%	All.	P. F.	%
– 5	21,650	1,339	6.1	392,624	19,004	6.2	10,275	850	8.3	334,549	21,184	6.3
5–10	2,582	143	4.9	43,093	2,226	5.2	1,545	141	9.1	47,220	2,510	5.3
10–20	4,009	217	5.4	52,283	4,734	9.1	946	27	2.9	57,238	4,978	8.7
20–30	6,383	377	5.9	72,487	6,650	8.9	1,624	69	4.2	80,494	7,096	8.6
30–40	4,601	309	6.5	57,599	5,564	9.7	1,818	164	8.2	63,568	5,977	9.0
40–50	3,396	339	9.5	46,801	5,777	12.3	1,963	164	8.1	53,449	6,410	12.0
50–60	3,026	311	7.4	51,868	6,242	12.0	4,339	521	12.0	61,082	7,124	11.6
60–70	4,875	361	7.4	78,170	6,996	17.2	4,398	279	6.5	93,576	7,785	8.3
70–	11,998	410	7.0									
Total	63,015	3,797	6.0	753,665	63,679	8.3	29,147	2,481	8.5	845,827	69,357	8.6

The mortality rate, per 1,000 of population, of the same age, is shown in the following table:

TABLE XX.—SHOWING PREVALENCE OF PNEUMONIC FEVER BY AGES

Mortality per 1,000 of population of same age, U. S., 1880.

Age.	Population.	Pneumonic Fever.	Per 1,000.
– 5	6,914,516	19,004	2.75
5–10	6,479,660	2,226	.33
10–20	10,726,601	4,734	.44
20–30	9,168,393	6,650	.72
30–40	6,369,362	5,564	.87
40–50	4,558,256	5,598	1.22
50–60	3,111,317	5,777	1.85
60–70	1,830,095	6,242	3.41
70–	1,007,583	6,996	6.95

SEX.

Pneumonic fever does not prevail equally in the two sexes—males being attacked oftener than females. This statement has been copied from

[40] Ziemssen's Handb. d. Spec. Path. u. Therap., Bd. v, S. 26.
[41] Statistik d. Pneumonie, Würzb., 1860.
[42] Quoted by Lepiné, Pneumonie, Wien, 1883, S. 16.
[43] Inaug. Diss., Erlangen, 1877, S. 26.
[44] Pleuritis u. Pneumonie, Berlin, 1862.
[45] Rept. Bd. Health, 1878.
[46] Rept. Bd. Health, 1886.
[47] Weller, Inaug. Diss., 1854.
[48] Reg. Rpt., 1881.
[49] Reg. Rpt., 1880.
[50] Reg. Rpt., 1879.
[51] Reg. Rpts., 1883–4–5.
[52] Rpt. Bd. Health, 1887.
[53] Census Rpts, 1880.
[54] Rpts. Health Com., 1885–86.
[55] Rpt. Bd. Health, 1886.
[56] These results differ essentially from those given by Osterlen, Med. Statistik, Tübengen, 1865.

one text-book into another from time immemorial, and is always accompanied by the simple and plausible explanation that, inasmuch as the habits and occupations of males lead to exposure of all kinds to a greater extent than their congeners, they are, therefore, oftener the subjects of this disease. In other words, it is affirmed that males are not more predisposed to the malady than are females, but are merely more exposed to what has been supposed to be the exciting causes.

LaRoche[57] is quite clear on this point, saying that "there are facts sufficient on record to warrant the assertion that this greater prevalence of the disease in the first mentioned (male) sex is not due to an inherent susceptibility, but to the result, when it occurs, of a series of fortuitous causes; more particularly to the circumstance that males—owing to the nature of their avocations and mode of life—are usually more exposed than females to the causes of pulmonary inflammations; and that in places where exposure is equal in both sexes the disease manifests itself as frequently in one as the other."

Other writers have made similar statements. Thus, Swett[58] says that males are attacked oftener than females because of increased exposure, for, "where the sexes are equally exposed to the vicissitudes of the weather the difference is not striking." Chomel[59] says that the apparent cause of this difference in the liability of the two sexes to attacks of the disease is in their work, and that in the case of young children and very aged persons this does not appear. Peacock[60] says that "the greater tendency to pneumonia in men is simply due to their exposure to the exciting causes of the disease." Fox[61] affirms that this difference between the sexes is not observable in the earlier periods of life, but it becomes apparent first at ages when the occupations of the sexes differ, and when the males are more exposed to climatic influences than females. When, however, the conditions of life for both sexes are identical, this relative disproportion in a great measure disappears."[62]

This is only partially, if at all, true for, independent of such influences, there is an inherent propensity in the male, greater than in the female, to take on this form of disease. Indeed the proportion of males over females attacked is greatest in the earliest years of life and at an age when both sexes are exposed in an equal degree to the vicissitudes of the weather and other alleged causes of the malady. In this instance, as in so many others, we must accept the fact, although we remain ignorant of the cause."[63]

The facts above indicated are clearly set forth in the following tables and statements:

TABLE XXI.—SHOWING PREVALENCE OF PNEUMONIC FEVER BY SEXES.

Morbility.

AUTHORITY.	Cases	Males.		Females	
		Cases	%	Cas's	%
Author. Private records	498	295	59.3	203	40.7
Borland, Boston City Hosp. Rpts., 1870	190	118	63.0	72	37.0
Bouillaud, Dic. de Méd., T. xiii	26	25	96.0	1	4.0
Briquet, quoted by Chomel, Pneumonie.	141	94	66.6	46	33.4
Boston City Hosp. Rpt., 1886	152	110	72.4	42	27.6
Chomel, Pneumonie, Leipzig, 1841, S. 317	275	212	77.0	63	23.0
Deutsche Med. Zeit., '83, Tregagno Epid.	100	50	50.0	50	50.0
Doubleday, N. Y. Med. Rec., Mar. 28, '85, p. 343	252	200	80.2	52	19.8
Folkmann, In. Diss., Erlangen, 1847, S. 9	125	79	63.2	46	36.8
Holt, N. Y. Med. Rec., Apr. 7, 1888, p. 386	234	142	60.7	92	39.3
Huss, Lungenentz., Leipzig, 1862, S. 71.	2710	2259	83.3	451	16.7
Juergensen, Ziemssen's Hand., Bd. v, S. 23	765	417	54.5	343	45.5
Louis, On Phthisis, Boston, 1836, p. 440	75	52	70.9	23	30.0
Newport Hospt. Rpts, 1884-87	29	20	68.9	9	31.1
New York Hospt. Rpts., 1878-87	577	460	79.9	117	20.1
Providence Hospt., Washington, Rpt., '87	9	5	55.5	4	44.5
Peacock, St. Thomas' Hospt. Rpts., Vol. v, 1875	100	81	81.0	19	19.0
Roosevelt Hospt., N. Y., Rpts., 1872-86	492	364	74.0	128	26.0
St. Louis Hospt. Rpts., 1886-87	9	3	33.3	6	66.7
Vienna Hospts., Biach, Statistik, 1882	11442	8247	72.0	3195	28.0
" " Juergensen, l. c., S. 23	7942	5457	68.8	2475	31.2
Waller, Inaug. Diss., Erlangen, '77, S. 26	81	71	87.6	10	12.4
Weller, Inaug. Diss., Zürich, 1854, S. 38.	30	20	66.7	10	33.3
Wilbrandt, In. Diss., Rastock, 1862, S. 9.	126	105	83.3	21	16.7
Schwarz, Inaug. Diss., Erlangen, 1881.	10	7	70.0	3	30.0
Folkmann, Inaug. Diss., Erlangen, 1847	125	79	63.2	46	36.8
Baginsky, Pneumonie u. Pleuritis, S. 4.	1023	556	54.1	467	45.9
Ziemssen, Pleuritis u. Pneumonie, S. 156	186	114	61.3	72	38.7
Kocher, Pneumonie, etc., Würzb., 1866	29	21	72.4	8	27.6
Totals	27653	19963	72.2	7740	27.8

TABLE XXII.—SHOWING PROPORTIONAL PREVALENCE OF PNEUMONIC FEVER BY SEXES.

Morbility.

AUTHORITY.	Total.		Males.			Females.		
	Adm.	P. F	Adm.	P. F	%	Adm.	P. F	%
Vienna Gen. Hospt., 1858-70	299,929	7942	188,273	5467	2.9	111,646	2475	2.2
N. Y. Hospital, 1878-87	42,394	577	32,789	460	1.4	9,605	117	1.2
Roosevelt Hospt., 1872-86	25,562	492	16,720	364	2.2	8,842	128	1.4
Providence Hospital, 1887	1,642	9	1,147	5	.4	495	4	.8
Newport Hospt., 1884-85	357	29	221	20	.9	136	9	6.6
Author	30,482	498	17,636	295	1.7	12,846	203	1.5
Totals	400,366	9547	256,786	6611	2.5	143,570	2936	2.0

TABLE XXIII.—SHOWING PREVALENCE OF PNEUMONIC FEVER BY SEXES.

Mortality.

AUTHORITY.	Deaths from P. F.	Males.		Females.	
		Deaths.	%	Deaths.	%
England and Wales, 1839, Reg. Rpt.	18,151	10,000	55.5	8,151	44.9
London, 1838-39. Reg. Rpt.	7,431	3,954		3,477	
New York, 1878. Health Rpt.	2,288	1,204	52.6	1,084	47.4
Eighteen Am. Cities, Reg. Rpts.	57,587	29,507	51.6	28,080	48.4
U. S. 1870 and 1880, Census Rpts.	103,665	57,851	56.1	45,214	43.9
Ziemssen, Prág. Vierteljs., 1858	161,640	89,533	55.5	72,107	44.5
Massachusetts, 1881, Reg. Rpt	2,967	1,481	50.0	1,486	50.0
Rhode Island, 1865-79, Reg. Rpt.	3,626	1,773	48.9	1,854	51.1
Zürich, 1840-51. Weller, l. c.	2,482	1,248	50.0	1,234	50.0
Vermont, 1857-79, Reg. Rpts.	7,331	3,709	50.6	3,616	49.4
Connecticut, 1885 86, Reg. Rpts.	1,268	675	53.3	593	46.7
Ontario, 1883-85, Reg. Rpts.	3,938	2,167	55.0	1,771	45.0
Massachusetts, 1860. Reg. Rpts.	1,639	931	56.8	708	43.2
St. Louis, 1886-87. Reg. Rpts	1,007	595	59.1	413	40.9
Totals	374,920	204,628	54.6	169,788	45.4

[57] Pneumonia, Phil., 1854, p. 418.
[58] Diseases of the Chest, N. Y., 1856, p. 82.
[59] Pneumonie, Leipzig, 1841, S. 317.
[60] St. Thomas' Hospt. Rpts., 1875.
[61] Reynold's Syst. Med., Phila., 1880, Vol. ii, p. 156.
[62] For further opinions in the same strain consult Grisolle, Traité de la Pneumonie, Paris, 1841, p. 114; Williams, Cycl. Prac. Med., Vol. iii, p. 289; Valleix, Guide du Méd. Prat., T. ii, p. 259; Green, Quain's Dic. Med., N. Y., 1883, p. 874; Tanner, Infancy and Childhood, Phila., 1872, p. 308; Huss, Lungenentzündung, Leipzig, 1861, S. 71; Lépine, Pneumonie, Wien., 1883, S. 18; Fagge, Prac. Med., 1887; Satterthwaite, Phila. Med. News, Jan. 5, 1889, p. 3.

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TABLE XXIV.—SHOWING PROPORTIONAL PREVALENCE OF PNEUMONIC FEVER BY SEXES.

AUTHORITY.	Males.			Females.		
	Deaths.	P. F.	%	Deaths.	P. F.	%
Cleveland, 1887, Rpt. Bd. Health	2,186	173	8.0	1,953	136	7.0
United States, 1880, Census Rpt.	391,960	35,493	9.1	364,933	27,560	7.5
Ontario, 1883-85, Reg. Rpts.	32,694	2,167	6.0	31,162	1,771	5.7
Massachusetts, 1863-81, Reg. Rpts.	269,567	20,401	7.5	270,918	19,591	7.2
Rhode Island, 1865-79 Reg. Rpts.	44,292	1,773	4.0	42,059	1,854	4.4
New Hampshire, [illegible] Rpt., 1885.	2,948	244	8.0	3,194	259	8.1
Vermont, 1880, Reg. Rpt.	2,548	178	7.0	2,674	158	5.9
Totals	766,195	60,431	7.8	716,893	51,329	7.1

TABLE XXV.—SHOWING PREVALENCE OF PNEUMONIC FEVER BY SEX AND AGE.

Morbility.

OBSERVER.	Age.	-5	5-10	10-20	20-30	30-40	40-50	50-60	60-70	70-
Doubleday, op. cit.	Males.		4	17	79	47	36	13	12	1
	Females.		2	4	18	13	5	5	4	2
Waller, op. cit.	Males.			15	29	7	7	2	3	
	Females.			2	2	2	1	2	1	
Huss, loc. cit.	Males.		6	195	901	714	284	69	16	2
	Females.		3	34	140	102	79	56	13	2
Ziemssen, loc. cit.	Males.	57		68	25					
	Females	38		20	14					
Gerhard, Am. Jour. Med. Sci.	Males.	12								
	Females	4								
	Males	81	44	28	11	16	23	17	41	18
Author.	Females	57	32	19	24	11	12	11	23	10
Totals.	Males.	150	122	281	1,031	784	351	105	72	21
	Females	99	57	73	184	128	127	84	41	13
Per cents.	Males.	66.2	68.0	79.4	84.9	86.0	73.4	55.5	63.7	61.7
	Females	39.8	32.0	20.6	15.1	14.0	26.6	44.5	36.3	38.3

TABLE XXVI.—SHOWING PREVALENCE OF PNEUMONIC FEVER BY SEX AND AGE.

Mortality.

AUTHORITY.	Age.	-5	5-10	10-20	20-30	30-40	40-50	50-60	60-70	70-
Zilrich, Weller, l.c.	Males.	461	74	14	28	53	100	137	231	148
	Females.	389	67	13	41	51	69	185	290	130
England, 1866, Reg. Rpt.,	Males.	8,049	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
	Females	2,503	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Massachusetts, 1881	Males.	501	38	38	98	116	145	156	163	223
	Females	411	48	56	88	109	115	131	178	351
Rhode Island, 1879,	Males.	55	6	2	4	10	13	18	19	33
	Females	35	6		4	14	13	16	19	33
Un. States, 1880,	Males.	10,449	1,145	2,583	3,904	3,081	3,333	3,614	3,580	3,690
	Females	8,555	1,081	2,151	2,686	2,483	2,265	2,163	2,662	3,415
Totals,	Males.	19,513	1,259	2,639	4,094	3,260	3,589	3,925	3,993	4,080
	Females	11,893	1,202	2,224	2,824	2,657	2,462	2,495	3,144	3,929
Per cents.	Males.	62.1	51.1	54.2	59.1	55.1	59.3	61.1	56.0	50.9
	Females	37.9	48.9	45.8	40.9	44.9	40.7	38.9	44.0	49.1

In England and Wales the death-rate from pneumonic fever is 1.34 and 1.06 per 1,000 for males and females respectively.[64] In the United States it is 1.39 per 1,000 for males and 1.12 for females.[65]

From these tables, which deal with numbers of sufficient magnitude to reduce to a minimum the sources of gross errors, it is clear that, all along the line, pneumonic fever prevails to a considerably greater extent in males than in females.

It has been supposed that this greater prevalence of the disease in males depended upon the class of people furnishing the statistics. That this is not the case is proven by the returns from various populations. Thus amongst a purely agricultural people the proportion of deaths is 58.8 males to 41.2 females. Amongst a manufacturing class it is 54.5 to 45.5, and in largest cities it is 53.6 to 46.4, males and females, respectively.[66]

In studying this subject statistically there are some points to which especial consideration should be accorded. Thus, if we confine our inquiries to the available statistics of *cases* we must draw our material largely from hospital reports. Now it is notorious that the two sexes do not seek admittance into these institutions in equal numbers, the proportion of males in the population from which they draw their patients being largely in excess of the females. It is clear, therefore, that if we confine ourselves to these figures we will be led into the error of attributing to males a much larger proportion of cases than really belongs to the sex.

On the contrary, if we turn our attention to the returns of *deaths*, the question arises whether the disease is equally fatal in males and females. According to most authorities and my own investigations the mortality is considerably greater in the latter than in the former sex. It follows, then, that if such statistics be employed the proportion of males will be shown too small.[67]

RACE.

The various races of mankind are not attacked with the same frequency by pneumonic fever. The negro[68] is peculiarly subject to attacks of this

[63] Dinstl, Œstr. Zeitschr. f. Prakt. Heilk., Bd. viii, 1862; Reuf, Heidelb. Med. Ann., Bd. ii, 1836; Tolmouch, Ann. de Hyg., T. xiv, p. 252, and others have not been able to notice any difference in the liability of the sexes to attacks of this disease.

[64] Second Rpt. Reg. Gen.; Walshe, Dis. Lungs, Lond., 1861, p. 294.

[65] U. S. Census Rpts., 1880.

[66] Juergensen, Ziemssen's Handb. d. Spec. Path. u. Therap., Bd. v, S. 34.

[67] The normal death-rate, from all causes, is somewhat greater in the male—15.35 per 1000—than in the female—14.81 per 1000 of population. See U. S. Census Rpts., 1880.

[68] Flint, Prac. Med., p. 181; Chomel, Pneumonie, S. 319; Cartwright, N. O. Med. Jour., Vol. ix, p. 205; Gibbs, Am. Jour Med. Sci., Oct. 1842; Despartes, Mal de St. Domingo, T. i; Daniel, Topog. and Dis. Guinea, p. 53-94; Leblond, Fevers, p. 77; Campet, Mal des Pays Chauds, p. 210; Bajon, Mal de Cayenne, T. i, p. 73; Grier, N. O. Med. Jour. Vol. ix. p. 430; Harris, Trans. Am. Med. Assn., Vol. v, p. 373; Prunner, Krankh. d. Orient, Erlangen, 1847; Pendleton. Fenner's Reports, Vol. i, p. 335; Lewis, N. O. Med. Jour., Vol. iv, p. 33; Jackson, Sketches of Jamaica, Vol. ii, p. 83; Hirsch Hist. Geog. Path., Erlangen, Bd. ii, S. 38; Drake, N. O. Med. Jour., Vol. i, p. 584, Tulloch, Stat. Rpts. Brit. Army; Coolidge, U. S. Army Rpts.; Armstrong, U. S. Marine Hospt. Rpts., 1886, p. 129; Lee, Copeland's Med. Dic., Vol. ii.; LaRoche, Pneumonie, p. 416.

malady, especially when removed from his native land. The average African's indolence, habits, mode of living, loss of sleep, debauchery, venereal excesses, cold sleeping rooms, exposure to night air and, to him, low range of temperature, etc., are conditions which certainly have an influence in causing an excessive prevalence in this race as seen in this country.

The functions of the skin in the negro are more extensive and important than in the Caucasian. It is more actively depurative and is to a greater extent supplementary to the lungs and liver—throwing off a great amount of moisture and carbonic acid—and external impressions which cause suppression of the perspiration are prone to be followed by pneumonic fever.

The disease is asthenic, rapidly exhaustive, attended with marked mental and physical prostration and is often latent and unsuspected. Copious effusion into the pleural sac, alveoli and bronchi is the rule. It frequently appears as an intercurrent affection—often without subjective symptoms.

During a series of years there occurred at the Memphis Marine Hospital 404 cases of disease amongst the white sailors, with 10 cases of pneumonic fever—.22 per cent.—whilst the blacks furnished 525 cases of all diseases, with 26 of pneumonic fever—5.0 per cent.[69] In the British Army this malady affords 20.2 and 33.3 cases per 1000 of force annually in whites and blacks respectively.[70] In 1880, in the Southern States[71] pneumonic fever figured in the census returns one-half more in the case of the blacks than in the whites.

Pneumonic fever is very prevalent amongst the American Indians. In a population of 78,521 the death-rate was 2.65 per 1000 persons and it caused 7.4 per cent. of all deaths.[72] It is also common to the Esquimaux, in whom it is very fatal, assuming a low, adynamic course.

The Malays and the natives of Hindostan and Burmah are but little prone to attacks of this disease.[73] This is also true of the Chinese.[74]

The malady is more prevalent in some branches of a race than in others. Thus it is the cause of a greater proportion of deaths in the Celt than in the Teuton.[75]

RESIDENCE.

Where people congregate for residence, there, other things being equal, will pneumonic fever be found in the greatest proportion.[76] This fact is shown in the following tables and statements:

TABLE XXVII.—SHOWING PREVALENCE OF PNEUMONIC FEVER IN RURAL AND URBAN DISTRICTS.

COUNTRY.	AUTHORITY.	Country.		Cities.	Excess in	
		Per 1000 Pop.	No.	Per 1000 Pop.	State	City.
Alabama	U. S. Census Rpts.	1.38	2	1.44	. .	.06
Ireland	Ziemssen	.27	4	.58	. .	.31
Belgium	Sanders	.85	2	1.74	. .	.89
Germany	Sanders, Hirsch.	1.34	19	1.54	. .	.20
Massachusetts	U. S. Census Rpts.	1.35	1	1.23	.12	. .
New York	Ibid.	1.03	3	1.82	. .	.79
California	Ibid.	.74	2	1.61	. .	.87
South Carolina	Ibid.	1.12	1	1.30	. .	.18
Scotland	Sanders	.73	8	1.12	. .	.39
Nor. & Sweden	Sanders	1.60	2	2.00	. .	.40
Illinois	U. S. Census Rpts.	1.48	1	1.09	.39	. .
Ohio	Ibid., Health Rpts.	.75	2	1.47	. .	.72
Colorado	U. S. Census Rpts.	1.92	1	1.85	.07	. .
Denmark	Sanders, Ziemssen	1.57	1	1.71	. .	.14
France	Sanders	1.90	1	2.56	. .	.66
Louisiana	U. S. Census Rpts.	1.56	1	1.59	. .	.03
Maryland	Ibid., Health Rpts.	1.13	1	1.13	. .	. .
Wisconsin	U. S. Census Rpts.	.78	1	.90	. .	.12
Connecticut	Ibid., Health Rpts.	1.15	2	1.43	. .	.28
Ontario	Reg. Rpts.	.51	9	1.02	. .	.51
Pennsylvania	U. S. Census Rpts., Reg. Rpts.	.97	2	1.47	. .	.50
Rhode Island	U. S. Census Rpts.	.90	1	1.50	. .	.60
Virginia	Ibid., Health Rpts.	1.24	2	1.52	. .	.28
Missouri	Ibid.	2.18	1	3.77	. .	1.59
Switzerland	Sanders	1.50	3	1.71	. .	.21
Averages		1.21		1.62		.41

In London, in 1838–39 there were reported 7,431 deaths from pneumonic fever, whilst the rural counties of Cornwall, Devonshire, Dorsetshire, Somersetshire and Wiltshire, with about the same aggregate population, returned, during the same years, but 3,446 deaths from the same cause, being in the proportion of 1000 urban to 463 rural. In these same years twenty-four town districts in England returned 15,062 deaths from this cause, whilst twelve country districts, having approximately the same population, returned only 6,218 deaths from the same cause, being in the proportion of 1000 urban to 413 rural.[77]

It follows, as a reasonable conclusion, that if pneumonic fever is more prevalent in the towns than in the cities that, in general, it will be met with more frequently in the larger cities than in the smaller ones,[78] and this can be shown to be a fact.

TABLE XXVIII. SHOWING PREVALENCE OF PNEUMONIC FEVER IN CITIES ACCORDING TO SIZE.

Mortality.

Population.	Cities No.	Per 1000 Pop.
Above 1,000,000	5	1.82
500,000 to 1,000,000	11	1.74
200,000 to 500,000	28	1.79
100,000 to 200,000	52	1.45
50,000 to 100,000	36	1.18
10,000 to 50,000	93	1.24
Total and average	225	1.38

Although pneumonic fever is comparatively infrequent in sparsely settled districts,[79] it there pursues a more acute course than in populous neighborhoods.

[69] Armstrong, op. cit., p. 129. [70] Tulloch, op. cit.

[71] U. S. Census Rpts., 1880.

[72] See U. S. Census Rpts, 1880; See also Glissan, Coolidge's Rpts., p. 276. It is very common and very fatal on the Indian Reservation of the West. See Coolidge's Rpts. p. 269; Hirsch, op. cit.; Drake, Dis. Int. Valley N. A., Cincinnati, 1850.

[73] See Balfour, Edinb. Med. and Surg. Jour., Vol. lxviii, p. 33; Hirsch, op. cit.

[74] U. S. Census Rpts., 1880, Vol. xi, p. 559.

[75] U. S. Census Rpts., 1880.

[76] Ziemssen, Prager Vierteljahrschr. 1858; Hirsch, Hist. u. Geog. Path. Bd. ii; Copeland, Med. Dic. Vol ii; Drysdale, N.Y. Med. Rec., Oct. 22, 1887, p. 551; Gairdner, London Lancet, 1887, Vol. ii, p. 247; Juergensen, Ziemssen's Handb. d. Spec. Path. u. Therap., Bd. v, S. 20; Sanders, Am. Jour. Med. Sci., July 1882, p. 89; Geike, Trans. Int. Med. Cong., N. Y. Med. Rec., Sept. 10, 1887, p. 294; Fox, Reynold's Syst. Med., Phila, 1880, Vol. ii.

[77] Reg. Gen. Rpts., 1838–9.

[78] Sanders, Am. Jour. Med. Sci., July, 1882, p. 90.

[79] See Geike, op. cit.; *et al.*

Domiciliary crowding is accompanied by an excessive prevalence of the disease.[80] Those who are ground down by the iron heel of poverty suffer far more than the wealthy.[81]

Those who go down to sea in ships are but little liable to attacks of this disease.[82]

Thus of 24,000 sailors in the French navy only 175—7.3 per 1000—were attacked by pneumonic fever.[83] In the U. S. navy it is even less prevalent, being in 1880, 5.2, per 1000, and in 1881, 4.5 per 1000.[84]

Soldiers are more liable to attacks of pneumonic fever than are civillians of the same age.[85] Thus in France the number of cases per 1000 of military age is 30, whilst in the French Army it is 39. Common soldiers suffer more than officers, and infantry more than cavalry.[86]

In garrison they suffer more than when on the march, in peace than in war[87] and on land than at sea.[88] These facts are probably due to the fine weather, pure air and healthy condition of the troops, when a march, campaign or voyage is undertaken.

The inmates of prisons, asylums, monasteries are said to be more liable to attacks of this malady than persons enjoying their freedom,[89] but this is not borne out by my experience or investigations.

For many years I saw all the cases of illness occurring among 500 inmates of cloisters, and met with pneumonic fever only twice in eight years.

Addison[90] says that "it is somewhat singular that, as a general rule, pneumonia is a disease not often met in hospital wards." This statement does not agree with the statistics which I have adduced or the observations of physicians generally.[91] Indeed I am convinced that the proportion is greater than in private practice.

RECURRENCE.

A person who has once had pneumonic fever is subsequently more liable to be attacked than one who has never experienced the disease.[92]

Of 78 infantile cases analyzed by West, 31 had had previous attacks—21 twice, 4 thrice, 2 four times, and 4 several times. Ziemssen found that of 201 cases, 19 had had the disease previously—14 twice, 3 thrice, and 4 four times. Of 175 cases tabulated by Grisolle, 54 had had preceding attacks. Of 212 cases analyzed by Griesinger, 36 had had the disease before. Rush[95] has noticed three, four, five and eight attacks in the same individual, Paget seven, Chomel ten, Frank eleven, Kocher[94] eleven, Andral sixteen, and Rust[95] as many as twenty-eight. Of 252 cases reported by Doubleday[96] 12 had had previous attacks. Of my 498 cases 101 had had the disease previously—76 twice, 14 thrice, 5 four times, 1 six times, and 1 eight times. In quite a large number of patients treated for other maladies the history developed the fact that they had previously suffered from multiple attacks of pneumonic fever.

Children are peculiarly liable to multiple attacks, Juergensen recording the case of a girl four years of age, who had already had six attacks.

The intervals between the attacks may be more or less prolonged—varying from a few weeks to several years.[97] They are necessarily shorter in proportion to the frequency of recurrence. Ziemssen's[98] inquiries developed the curious fact that in some cases there is a tendency to recurrence at about the same time each year.

Thus in one case the first attack occurred Dec. 17, 1856, and the second Dec. 12, 1857. In another case the first attack occurred Aug. 8, 1856, and the second July 6, 1857. In yet another instance the first attack came on Jan. 28, 1856, the second Jan. 6, 1858, and the third Jan. 25, 1859.

Such coincidences have not been conspicuous in my list of cases.

Recurrence is oftenest noticed when the local lesion is in the left lung,[99] and the same lung is apt to be again and again affected,[100] although not necessarily in the same part.[101]

The persistent recurrences of pneumonic fever has been attributed to the gouty diathesis.[102] In England, where gout, amongst the upper classes, is the national disease and the insignia of age and respectability, the occurrence of repeated attacks of this disease in subjects of this diathesis may be a frequent coincidence, but I venture the assertion that recurrent attacks occur with equal frequency in other lands where gout is almost unknown.

[80] Sanders, op. cit., p. 91; Gairdner, op. cit., p. 247.
[81] Hirsch, op. cit., S. 37; Vacher Med. Stat. et Mortal, etc., en Paris, 1865, p. 139; Newton, Trans. Conn. Med. Soc., 1888.
[82] Grisolle, Traité de la Pneumonie; Swett, Dis. Chest. p. 81; Fox, op. cit., p. 154; Hermann, Lungenentzündung, S. 6.
[83] LeRoy de Mérincourt, quoted by Grisolle.
[84] U. S. Naval Rpts., 1880-81.
[85] Laveran, Ann. d'Hyg., 1860; Fox, op. cit., p. 155; Hermann, op. cit, S. 00; Lancereaux, Ann. d'Hyg., T. xiii, p. 209; Valleix, Prat. Méd.; Marsten, Trans. Int. Med. Cong., Washington, 1887.
[86] Fox, op. cit., p. 155; Hermann, op. cit., S. 20.
[87] See Hermann, op. cit., S. 6.
[88] Lebert, Klinik. d. Brustkrankh., S. 710, comes to an opposite conclusion on this point.
[89] Vacher, op. cit., p. 139; Juergensen, op. cit., S. 21; *et al.*
[90] London Lancet, N. Y., 1855, Vol. i, p. 357.
[91] Faure-Villar, Mém. de Méd. Mil., 1853, p. 204.
[92] Frank, Interpret. Clinicæ, Tüb., 1812, p. 96; Grisolle, Traité de la Pneumonie, p. 3; Andral, Med. Clin., Vol. ii, p. 192; Chomel, Pneumonie, S. 319; LaRoche, Pneumonia, 1854, p. 400; Schuyler, N. Y. Med. Jour., 1883, Sept. and Oct., pp. 232-401; Ziemssen, Pleuritis u. Pneumonie, S. 753; Flint, Jour. Am. Med. Assn., Nov., 1885, p. 613; Paget, Clin. Lec.; Juergeusen, Ziemssen's Handb. Bd. v, S. 29; Orton, Med. News, Nov. 28, 1885, p. 613; Griesinger, Arch. d. Heilk., Bd. i, S. 471; Curtis, Boston Med. and Surg. Jour., Mar. 17, 1881, p. 251; Baker, Proc. Mich. Bd. Health, Oct. 1, 1886, p. 11; West, Dis. Children; Col. Inv. Com. Rpt., Brit. Med. Jour., Dec. 1, 1883; Doubleday, N. Y. Med. Rec., Mar. 28, 1885, p. 343; Weber, N. Y. Med Rec., Apr. 4, 1886, p. 373; Baginsky, Pneumonie, etc., Würzb., 1880, S. 8; Smythe, Trans. Indiana Med. Soc., 1888, p. 34.
[93] Quoted by LaRoche, op. cit., p. 400.
[94] Lungenentzündung, etc., Würzb., 1866, S. 4.
[95] Quoted by Ziemssen, op. cit., S. 154.
[96] N. Y. Med. Rec., Mar. 28, 1885, p. 343.
[97] Fox, Reynold's Syst. Med., Phila., 1880, Vol. ii, p. 157, found recurrence to take place, usually, in from 3 to 5 years.
[98] Op cit., S. 153. [99] Fox, op. cit., p. 157.
[100] Kocher, op. cit., S. 4. [101] Juergeusen, op. cit., S. 29.
[102] Curtis, Boston Med. and Surg., Mar. 17, 1881, p. 251; Paget, op. cit.

REPORTS FROM HOSPITALS.

SURGICAL CLINICS AT THE WESTERN PENNSYLVANIA HOSPITAL BEFORE THE STUDENTS OF THE WESTERN PENNSYLVANIA MEDICAL COLLEGE.

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[Reported by WILL. N. PRINGLE, M.D., a member of the Graduating Class.]

February 9, 1889.

THE TREATMENT OF HÆMORRHOIDS.

I have a patient to show you to-day with that very prevalent disease, namely, hæmorrhoids. Now as you know there are two principal varieties of hæmorrhoids, the internal and the external, and those two varieties have their seats in the two plexuses of hæmorrhoidal veins. The inferior plexus is situated just within the sphincter ani, and empties its blood into the illiac veins, and then through the inferior vena cava to the heart. The superior plexus is situated about one inch above the inferior plexus, and empties its blood, via the portal system, into the liver, and thence through the vena cava to the heart. The causes of hæmorrhoids is the same as that of varicose veins in any other part of the body, and that is obstruction to the return circulation; this may result from various causes, as abdominal tumor, gravid uterus, constipation, impaction of fecal matter in the rectum, being constantly on the feet, together with many other states and conditions of the system. External piles are at first the same as internal piles, but from constant congestion and by being repeatedly forced down in defecation, they become as it were strangulated in the rectum and the blood becomes organized, into forming small tumors which sometimes appear as little tags, around the verge of the anus.

It is said that man is the only animal that is subject to piles, a penalty apparently for his being in the erect posture. The treatment is paliative and curative. The paliative treatment consists in removing obstructions to the return circulation and stimulating a torpid liver when this condition exists. A favorate laxative with me is that known as Van Buren's mixture which is as follows:

℞. Magnesia sulphas,
Potassii bitartras,
Magnesia carbonas,
Sulphur sublimat, āā equal parts.
Mix et signa one heaping teaspoonful in water before breakfast.

This mixture, taken in this way, keeps the bowels in a softened and moistened condition and favors peristaltic action. The curative or radical treatment consists in operative measures. In external piles where they appear as little tumors or tags, you may snip them off with the scissors, or a scalpel; there is very rarely any hæmorrhage, and when there is it is easily controlled, as the bleeding point is under your eye. Not so, however, with internal piles; in these the vessels may be large and not so readily accessible, and patients have been known to bleed to death before these vessels could be controlled. In dealing with this form of piles we use the clamp, the cautery, or the ligature. In using the clamp, the pile is caught at its base, between the jaws of the clamp, tightly compressed, then cut or shaved off, in front of the clamp, and the cut surface or stump seared with the actual cautery; this is Mr. Smith's operation, and the clamp is called Smith's clamp. Another and a more recent operation consists in injecting the pile with carbolic acid. This operation originated among men outside of the profession, or irregulars; it sometimes acts very effectually and with so little pain or inconvenience to the patient, that the regular profession are now giving it a trial. This is not the first case, either, in which the profession has received valuable hints from charlatans. Mr. Heaton's cure for hernia, by the use of white oak bark, originated in the same class of people, and the fact that we accept and use these hints, merely shows that we, as a class, are not bigoted, obstinate, nor old fogies, but are willing to accept any thing, from any source, that offers good to our patients.

The patient requires to be prepared for this operation, the bowels should be unloaded by a cathartic the day before, and an injection should thoroughly cleanse out the rectum a few hours before the operation; the external surface should also be thoroughly washed with soap and water. I propose to inject these piles to-day with carbolic acid and the solution I prefer consists of the following:

℞. Ac. carb . . . . . ℥ss.
Glycerine, }
Aqua, } . . . . . āā ℥j. ℿ

The needle is then made to pierce each pile and four or five drops of the solution left as near the centre of the pile as possible. In order to deaden the sensibility to pain which sometimes follows the injection of the acid, I will first inject ten or fifteen drops of a 4 per cent. solution of cocaine. After the injection of the cocaine, the needle is allowed to remain in the pile about two minutes, while the syringe is removed and filled with the acid solution, and again attached to the needle and the acid injected. Shortly after the injection of the acid the pile turns to a purplish or bluish color and becomes hard. A compress is applied over the anus retained by a T bandage, the patient is put to bed and given a quarter of a grain of morphia, and the pile soon shrivels up and dis-

appears. To-morrow the patient will be allowed to walk about the ward, and in a day or two can go about his business.

Some precautions are always advisable in doing this operation; after you have dilated the sphincter ani, and brought the piles into view, it is always well to pass a small sponge with a string attached into the rectum, to prevent feculent matter from coming down to interfere with the operation. It is also necessary for you to lubricate all the surrounding tissues, to protect them from any of the acid that may be dropped on them. I would also suggest that you do all as humanly as possible; do not cause your patient unnecessary pain. I think that surgeons get careless about this sometimes. I am sure that if it was their own case they would be more careful. As I said, this operation is only on trial yet. In my hands it has not yet yielded very brilliant results, and I do not believe that it is as efficient or as certain in its results as our old plan of operating.

POTTS' FRACTURE.

I have another case to show you, one of interest, and one that affords me an excellent opportunity to speak to you on the subject of Potts' fracture. This is an exceedingly common form of accident and one which you may be called on to treat during the first months of your practice. It consists of a fracture of the fibula two and one-half inches above the ankle joint, together with rupture of the internal lateral ligament and frequently the internal malleolus is fractured off and dislocated inward with the foot and astragalus. It is caused by a violent turning of the foot outward; the patient falls from a heighth, striking on the inner side of his foot; the foot is strongly everted and the entire weight of the body coming on the internal lateral ligament, it ruptures or fractures off the internal malleolus; the whole force is then directed against the external malleolus forcing it outward.

Now, the fibula you know, is attached to the tibia by means of the interosseous or tibio-fibular ligament. With strong pressure forcing the lower end of the bone outward, the bone is made to act as a lever, with the ligament acting as a fulcrum, and the fibula gives way and is thrown against the tibia. The bones may be forced through the skin, constituting a compound fracture, and the joint may be thoroughly disorganized, making it a compound complicated fracture. There is increased mobility; the lower end of the tibia or the internal malleolus forms a prominent projection inward. At the seat of fracture of the fibula a depression exists, as there also is where the internal malleolus is fractured off; and you will see by looking at this patient's foot that the joint has a "spread" appearance. The object of treatment is to prevent the foot from remaining everted, the tibia and fibula must be made to grasp the astragalus and then be retained in that position. For this purpose many splints and appliances have been devised. It is not sufficient that the foot be made straight, it must be held in an inverted position. In this hospital we use the plaster dressing, and I had intended to apply that dressing to this limb in your presence to-day, but as you see, the limb is too much swollen and congested, so we will defer that operation and show you a fractured humerus.

TREATMENT FOR FRACTURES OF THE HUMERUS.

We have a patient here who had his humerus fractured by direct violence on December 7. He remained in the hospital for about four weeks, when he went about his business. Shortly afterward when alighting from a moving car he had his arm twisted, refracturing his humerus at the same place by indirect violence. I would like to say a few words here in regard to the treatment of fractures of this bone. We more frequently have non-union of fractures in this, than in any other bone in the body, and especially if it be fractured about its middle, and this, I think, is from faulty treatment, from not retaining the fractured extremities in apposition. We may be able to reduce the fracture, and we almost always do; but do we retain it in position, do we immobilize it? I think that we frequently do not. The arm is an exceedingly difficult extremity to keep perfectly quiet; patients will move the arm more or less in spite of themselves. It has long been a rule in the treatment of fractures that the joint nearest a fracture be confined, or rendered immobile; this I consider good practice in the majority of cases, but I think there are exceptions to it, and the case of a fracture at the middle of the humerus, I think, is an exception to the rule; because, if the arm cannot be kept at rest and the elbow is firmly confined, then the motion must take place at the seat of fracture; therefore I do not fix the elbow, and I believe that to be the proper treatment. This, however, only pertains to fractures of the shaft. When the fracture is through, or near the condyles, then, of course, it is preëminently necessary to fix the elbow. Acting on my convictions therefore, I propose to apply to this fracture a short anterior and a short posterior splint, and a shoulder cap.

February 23, 1889.

GUNSHOT-WOUND IN THE LEG.

I have a patient here to show you to-day, a boy of 14 years of age, who two weeks ago shot himself in the leg below the knee with a small rifle, known as a target, or Flobert rifle. He at once applied to a physician, who was evidently a sensible man, inasmuch he at once endeavored to render the wound antiseptic; but who again was not as sensible as he might have been, because he probed the wound. He did not find the ball

either, a usual result in such cases. The boy then came to the hospital and was not probed here, and the ball still remains in his leg; and as you see he does not suffer any inconvenience from it, he walks well and feels no pain. This should be a very instructive case to you, because it will serve to illustrate the folly of probing for bullets, in gun-shot injuries. A great surgeon has divided gun-shot wounds into two great classes, namely those that have been fingered, and those that have not been fingered. The greatest damage that a bullet can do is done in its passage through the body, it being surrounded by fire from the discharge of the powder and its rapid flight through the air, have rendered it aseptic, and the wound it inflicts will therefore be aseptic, and you know that the tissues are very tolerant of metallic substances; you know this from seeing us day after day inserting metallic sutures into almost any and every tissue of the body. You also know that men have carried needles, bullets and other metallic substances in their bodies for years without inconvenience. It is said that Andrew Jackson carried a bullet, received in a duel, in his body for twenty years, with little or no pain or inconvenience. You know therefore that bullets are in many cases aseptic, and inocuous, and that by probing the wound with a foul finger, or a dirty probe, you may carry germs into the wound, thereby rendering the wound septic and doing your patient irreparable damage. There are, however, cases in which it becomes absolutely necessary to remove the bullet, as where it rests in a vital part, or against a nerve. And where you do probe a wound, you should do it strictly, antiseptically, cleanse the surrounding parts, cleanse your hands and probes in antiseptic solutions and never pass a probe into a gun-shot wound in search of a bullet until you have everything in readiness to remove the ball if your probe should come in contact with it. Otherwise the information gained by probing will be lost, and you will have done an unwise act. Never do anything, until you are prepared to do everything, is a good motto in these cases.

Dr. Park, the distinguished Buffalo surgeon, relates a case of a young man, a laborer in a freight yard, being accidently shot in the region of the nipple, a number of surgeons gathered at once and began probing the wound. When Dr. Park arrived he was assured by one of the surgeons, (who triumphantly exhibited his probe), that he had passed his probe into the man's body to the extent of three or four inches. He was asked if he found the bullet, and replied he did not. Dr. Park then suggested that they make a thorough examination of the body, and on turning the man over, they found another wound, at the lower angle of the scapula; the wound of exit of the bullet. And these surgeons had been diligently probing for a bullet that was not in the man's body, but that had gone flying far out in the freight yard. And suppose they had succeeded in locating the ball in the body, their information could have availed them nothing, because they were not prepared to remove it. Dr. Park relates another case, of a surgeon passing a probe into a man's brain, in search of a bullet, when the information could have been of no value whatever to him, because he was not prepared to remove it, and he was already aware that it was in the brain, because brain substance was oozing from the wound behind the ear. I hope now that you all see the folly of such proceedings and not only the folly but the danger. You not only render the wound septic, but you may disturb clots and cause hæmorrhage, which may cost your patient his life. Now let me tell you the proper thing to do in these cases. First occlude the wound with some antiseptic material, cotton wool or soft cloth saturated in any antiseptic fluid, will answer the purpose very well, then if it becomes necessary to remove the ball, transport your patient to a place where you can have all the requirements and appliances for removing the ball before you begin to probe, and be sure that the ball is still in the patient's body before you do any unnecessary probing. Also bear in mind that bullets almost always deviate or are deflected from their course; do not try to force your probe in any direction, but allow it to follow the course of the wound slowly and carefully, which it will sometimes do almost by its own weight.

MEDICAL PROGRESS.

ON DIAPHORESIS IN SYPHILIS.—DR. RADESTOCK, of Geithain (Saxony), again calls attention to this subject in an article which recently appeared in the *Therapeutische Monatshefte*, where he mentions the use of decoctions from lignum vitæ, divers infusions, mercurial fumigations, and among others, the thermal springs at Aix-la-Chapelle and Wiesbaden. Syphilis would not improve by the sole use of sudorific means, without the help of classical treatment, but their combination with mercury or iodide of potassium appears of undeniable value, inasmuch, probably, as it favors the elimination of the specific poisons, the same as sweats in fevers or infectious diseases. We notice, for instance, that in people who perspire a great deal, as in soldiers or stokers, roseola does not last as long as in others, and even smallpox is less serious. Radestock's method consists in prescribing a hot bath of about 30 minutes duration, until the skin becomes red. To continue the perspiration tea or hot infusions are given, or subcutaneous injections of 2 centigr. of chlor-

hydrate of pilocarpine daily, as does Lewin in the Berlin Charité for medium forms of syphilis. Also vapor baths or hot-air baths might be used, which could be given while the patient is in bed, with the help of a stove invented by Dr. Friedler, and used by him in the Dresden Hospital. At first, and in grave cases, Radestock bathes his patients every day; later on, when all manfestations have disappeared, once a week; after that at greater intervals.—*Journal de Médicine de Paris*, May 5, 1889.

A New rapid Process of Coloring the Tubercle Bacillus.—Mr. Gabriel Roux communicates a new method, by Martin Herman, of Liège, which is as follows: After the cover-glass preparations have been made as usual they are dipped for one minute in the following mixture: 1. Crystal violet, 1 gr., alcohol of 95°, 30 c. c., (a few drops). 2. Carbonate of ammonia, 1 gr., distilled water, 100 c. c. (a few cubic centimetres), which is kept at the boiling point during the entire period of immersion. Then wash in water and discolor for four or five seconds in a water solution of nitric acid, 1:10 for sputa and 1:4 for sections. Then wash in alcohol of 95 per cent. and examine immediately. If a double coloring is desired, immerse for one to two minutes in the following solution: Eosine 1 grm., alcohol of 60° 100 c. c. The great merit of this new process is that it is trustworthy, and requires no especial degree of skill; it is not any more rapid, nor any more brilliant in its results than its immediate predecessors, but it is more practical.—*La Province Médicale*, May 11, 1889.

Cystic Disease of Kidney Diagnosed During Life.—At a recent meeting of the Glasgow Pathological and Clinical Society, Dr. David Newman showed preparations from a case of cystic degeneration of the kidney diagnosed during life, which presented exceptional symptoms. The patient, a man æt. 46, suffered from dyspeptic symptoms, headache, giddiness, persistent renal pain, and hæmaturia. The pain was first felt on the right side, and, although severe, was unattended by hæmaturia. Eleven months subsequently pain developed in the left side, with a slight tinge of blood in the urine. When he came under Dr. Newman's care the symptoms led to the suspicion of malignant tumor of the kidney; but, on rough examination, it was found that the urine contained a larger quantity of albumen than could be accounted for by the hæmaturia alone, and for the purpose of ascertaining the relative amount of hæmoglobin and albumen a careful analysis of the urine was made on twelve occasions. When the albuminuria was due to the presence of blood, the ratio of hæmoglobin to albumen was as 1.6 to 1, but as shown by the analysis, the average ratio in the twelve specimens was as 1 to 3.6, that is to say, not more than a fifth part of the albumen present in the urine could be attributed to the blood. The microscope showed hyaline and tube casts; by obtaining separate samples of urine from the two ureters, it was ascertained that the blood came from the left kidney only. Physical examination revealed distinct swellings in both renal regions, which steadily increased in size. There was also evidence of hypertrophy of the left ventricle of the heart and increased arterial tension. The case illustrated the value of detailed estimation of the quantities of albumen and hæmoglobin in cases of hæmaturia, and also the benefits to be derived from an examination of the separate specimens of urine from each kidney. In most cases of cystic disease the symptoms were those of chronic Bright's disease, with swellings in the groins superadded; not infrequently this disease had been confounded with ovarian cystoma, and kidneys had been removed under mistaken diagnosis. In respect to surgical treatment nothing should be done. On account of the wide distribution and multilocular character of the cysts, no benefit could be expected from nephrotomy, while nephrectomy was contra-indicated, because the disease was not only bilateral, but the kidneys were the seat of chronic interstitial nephritis, so that if one were removed, the remaining one was unable to do the additional work thrown upon it. Of 16 cases of nephrectomy for cystic degeneration which Dr. Newman had collected, 6 died, 2 from peritonitis, 1 from uræmia, 2 from shock and collapse, 1 from œdema of the lungs, while 10 recovered, thus giving a mortality of 37.5 per cent.—*The British Medical Journal, May 25, 1889.*

Murmurs in Thoracic Vessels from Effusion of Fluid into Pleura.—Dr. Sidney Phillips, in a series of papers just published in *The Lancet*, says: A murmur is sometimes produced in the large vessels of the thorax from the rapid effusion of fluid into the pleura. The following case affords an example of this. A male patient who had been ill in bed for a month with chest symptoms, who had been repeatedly examined by several physicians, and in whom it was certain that no murmurs existed, after pleuritic friction had been observed for some days, was found to have the signs of a large accumulation of fluid in the left pleural cavity. The effusion was very rapid, the dulness in a few hours rising to the level of the spine of the scapula. The apex of the heart was felt plainly in the right axilla, and there was evidence of considerable compression of the lung. Simultaneously a murmur of great intensity was developed; it was heard beneath the sternum opposite the second and third rib cartilages, and could be traced obliquely to the left behind that bone in the second and third left intercostal spaces. Supervening suddenly as it did,

and coincidently with the rapid effusion into the pleura, it could hardly have been the result of anything but traction upon and stretching of one of the large vessels in the thorax, and from its position and direction appeared to be produced in the pulmonary artery. That this was so was borne out by the fact that after several aspirations of fluid the chest was eventually incised, and as the heart returned to its position the murmur entirely disappeared. I have not found any definite allusion in any of the works I have been able to consult of murmurs in the arteries produced in this way, but the recognition might be important, for in cases where the patient had by previous observation been known to be free from murmur such a bruit as that heard might be readily taken in conjunction with the other physical signs for evidence of aneurism or intra-thoracic tumor.

PURE CULTURE OF THE TETANUS BACILLUS OF NICOLAÏER.—M. KITASATO, of Tokio, Japan, recalls the discovery of the tetanus bacillus by Nicolaïer, its presence in the soil, its existence in men afflicted with tetanus (Rosenbach), and claims that so far it has not been possible to obtain pure cultures of this bacillus.

A young soldier died from tetanus. In the pus of his wound the bacillus of Nicolaïer was found. Inoculation of this pus upon mice produced in the latter genuine tetanus, and the characteristic bacillus was found in them. But cultivation failed, and only mixed cultures were obtained. In examining these more closely Kitasato found by the side of Nicolaïer's bacillus, three kinds of anaerobic microbes, and seven kinds of aerobic microbes; neither the former nor the latter could cause tetanus.

The tetanus bacillus is a genuine anaerobic bacillus. After having discovered that the mixed cultures obtained from the tetanus pus contained the largest number of Nicolaïer's bacilli when the oven is kept at 36°, Kitasato exposed them for some time to this temperature, and then, the cultures being in full development, he placed them for a short time in a water-bath at 80°. This temperature kills the adventitious microbes, but lets the spores of the tetanus bacillus live. After this partial sterilization the plate-culture was kept in a temperature of from 18° to 21°, in an atmosphere filled with hydrogen. In this way he succeeded in obtaining a pure culture of Nicolaïer's bacillus, with which he was able to produce tetanus in rats, guinea-pigs, and mice. The tetanus always begins to spread from the point of inoculation. The parts surrounding the latter are always the first to be affected with tetanus.

Nicolaïer's bacillus bears heat well. It is necessary to expose it to a temperature of 100° for five minutes in order to kill it. A solution of phenic acid of 5 per cent. did not destroy at the end of ten minutes. It is remarkable that the bacilli disappeared rapidly from the blood. It seems that they develop ptomaines there. This must be established by future experiments.—*La Sémaine Médicale*, No. 18, 1889.

A NEW PTOMAINE.—HOFFA, of Würzburg, wishes a distinction made between septic intoxication and septic infection. When numerous microörganisms are found in the blood, one may speak of a septic infection. But in other microbic affections the microbes are not found in great numbers, on the contrary, they are very rare and it is almost by accident that they are found. In these cases where the bacteria disappear so rapidly from the organism, they are killed by the ptomaines which they produce, and of which various authors (v. Bergmann, Brieger, and others) have already shown us typical forms.

Hoffa repeated the experiments of Brieger. He intoxicated a rabbit with bacilli of septicæmia of mice, and prepared it according to Brieger's process, carefully excluding the urinary organs and alimentary canal from the carcass to be examined. In this way he succeeded in isolating a base which was recognized as methylguanidine ($C_4H_7N_3$), *i. e.*, as the same poison which Brieger and Bochlisch obtained with the bacilli of Finkler-Prior.

As methylguanidine originates from the oxidation of creatine, Hoffa subjected a healthy rabbit to a chemical analysis, treating it in the same way as the one infected with bacilli, and no traces of methylguanidine could be found. This base is a strong poison, of which 0.20 centigr. suffice to kill a rabbit. It is, therefore, methylguanidine which is produced by the bacilli of septicæmia, and which kills the animals. From the bacilli of rats he isolated a toxic base, of which $C_3H_8N_2$ is the formula; it is, therefore, a principle differing from methylguanidine.—*La Sémaine Médicale*, No. 18, 1889.

ON COLD ABSCESSES AFTER MALARIA.—DE SABOIA (Rio de Janeiro), in the "Bull et mém. de la soc. de chir. de Paris," T. xiv, p. 141, calls attention to a very rare exception to the rule that most cold abscesses are of tuberculous origin. He observed in 4 cases cold abscesses after acute malarial infection. After a severe malarial fever in the different patients a large number of abscesses formed within 12–48 hours, differing in size from almonds to considerable volume, without any fever, pain, or reddening of the skin; only slight tenderness to pressure indicated the formation of a new pus center. In one patient 28 abscesses had to be opened within a few weeks. A cure resulted in every case. Bacteriological examination proved the existence in the pus of the malarial microbes described by Mardrinfava and Celli. The possibility of tuberculosis was absolutely excluded.—*Centralblatt für Chirurgie*, May 11, 1889.

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SATURDAY, JUNE 22, 1889.

THE NEED OF SANITARY LEGISLATION.

It is an accepted fact that the health of a Nation is paramount to its commercial prosperity, and that when human life is imperiled thereby, even the wheels of commerce must stop. It is also an axiom that the demands of the public good are paramount to individual interests. The practical application of restraints upon business for the protection of health is often severe in its effects upon individual interests, and nothing but the strong arm of the law can make such restraints operative. Hence the necessity of municipal and of State legislation for the preservation and protection of the public health. The intelligence of the American people is such, and such their estimate of human life, that they need only to be advised as to the best means of exercising sanitary control, to strongly uphold all legitimate legislation in this direction. In fact, the progress in matters of sanitary legislation during the last few years has been in the highest degree commendable.

Until a comparatively recent period the control of matters affecting the public health was vested in the police legislation of our larger cities. More recently nearly every incorporated city in the Union has more or less perfectly developed its system of sanitary supervision. During the last fifteen years State after State has taken this matter in hand, until now, instead of a half dozen, at least thirty of the States of this Commonwealth have organized their State Boards of Health. So far as we are able to learn, the power vested in these several Boards has been exercised, in the main, with eminent discretion. In each individual city and in each State, even in emergencies, the exercise of the powers thus vested seem ample to meet ordinary necessities.

But there are conditions in which the limitations imposed upon cities and even upon States are such as to render necessary a supervising control which reaches beyond the city, beyond the State, and can only be exercised by the authority and in the name of the Nation. We do not propose to enter upon the discussion of local or State rights as applied to the control of epidemics and infectious diseases, but we think it is manifest to all candid men, that emergencies are liable to occur at any time wherein adjacent States may find their interests conflicting, and where want of concerted action may render sanitary restrictions practically inoperative. The peril to the body politic, when a pestilence is traveling across the continent, is not limited to cities or by States. It is national in its relations, and the law that cannot be operative for its control, by reason of municipal or State limitations, is unequal to the emergency. Hence the necessity of National legislation and maintenance of a National Board of Health.

In this country power is so largely vested in the States that it becomes a matter of most careful consideration as to the proper adjustment of responsibilities and control, but we are confident that the time is at hand when such adjustments should be made. In the day of severe calamity, we shall not have time for the settlement of questions of such moment.

It is manifest that National legislation alone can meet the needs when National interests are involved, and the importance of the subject is such that the wisest measures should be thoroughly matured and made operative by appropriate legislation. Possibly a Bureau, in connection with one of the State Departments, could best assume the surveillance of the public health; of International and inter-State quarantine, of vital statistics, and of the sanitary conditions of National thoroughfares, and thus render an invaluable service to the Nation.

But the Department of Public Health should be removed as far as possible from the vicissitudes incident to politics, and those who by reason of talent, culture and fitness may be called to fill the responsible positions connected with this depart-

ment, should be so assured of a permanency as to warrant the sacrifices that such appointment might demand. The subject is not new; nor should it be allowed to grow *old* while there is such manifest need of further National legislation for the perfection of our sanitary laws.

MASSAGE IN GYNECOLOGICAL PRACTICE.

Resuming the discussion of this subject at the point where it closed in the last issue, we desire to consider, *first*, the method of treatment of uterine displacement adopted by Brand.

Brandt's most original method of treatment, and the one indeed whose invention is no doubt rightly ascribed to him, is termed "elevation of the uterus" (German, *Uterushebung*; Swedish, Lyftrörelser), which may be briefly described as practiced by him in prolapsus uteri. The patient lies on a low, short, reclining chair. The physician begins by replacing the uterus, which he then supports by pressure on the cervix. He then indicates to an assistant the position of the fundus. The assistant lays his outspread hands upon the lower part of the abdomen and makes equable pressure in a backward and upward direction, taking care not to displace the uterus. This manœuvre is repeated thrice, deeper pressure being made each time in the direction of the inguinal region. The assistant then holding his hands in a strongly supinated position, lays the tips of his fingers on the abdomen close to the edge of the symphysis and bending over the patient until his face approaches hers, he lays both hands quite flat on the patient's abdomen (one at either side of the physician's hands) and pushing the abdominal walls before him seeks to press deep down upon the cervix, taking care to keep close to the posterior surface of the symphysis. The physician next removes his external hand, while the assistant seizes the uterus from before and a little to one side and endeavors to lift it in an upward and forward direction, succeeding in which he then slowly and cautiously allows it to glide from his hands.

The height to which the uterus can be raised, depends upon the extent of relaxation of its ligaments and the degree of vaginal collapse. The uterus should be only moderately elevated at first; later on it should, in some cases, be raised to the level of the umbilicus. The uterus should be elevated in this manner three times, with short intervals, at each sitting; after which massage of the uterus, Douglas' folds and the parametrium must be practiced. Contraindications are every acute and subacute inflammation of the pelvic organs, as well as the presence of an exudate. In prolapse the object of treatment is more quickly attained if the patient (at least in the early part of the treatment) keeps in bed and if the elevation of the uterus be practiced twice per diem; otherwise much of the results may be lost.

The next measure to be adopted, is that of pressure made a few times upon the pudendal, hypogastric and solar nerves. The object of this is to abolish all unpleasant sensations and prevent lascivious sensations.

Next in order is the forced abduction of the knees against muscular action exercised by the patient. This is regarded by Brandt and his followers, as a potent means of strengthening the pelvic floor; for the pelvic diaphragm (and especially the levator ani) is thereby excited to contraction whereby the muscular structures are gradually strengthened.

Finally, we have the stroking of the back and the tapping of the lumbar and sacral regions. The former is practiced by holding the hands together and making with the ulnar border of the little fingers short rapid strokes at either side of the spinal column from the neck to the loins and back again. The tapping of the lumbar and sacral regions is accomplished by means of the the closed hand, five strokes being made twice on either side of the lumbar vertebræ and seven strokes twice repeated on either side of the sacrum. These taps are to be made from the wrist joint and not from the elbow.

In regard to Brandt's treatment as applied to the various forms of pelvic exudates, it may be said to offer most available and valuable aid to the deplorably limited therapeusis of this department of gynecology. One writer (Dr. A. Winawer, *Centr. für Gynäkologie*, Dec. 29, 1888) who has found it most useful as an adjuvant to the diagnosis of tubal tumors, expresses himself as follows: "In cases where the tube is embedded in knotty masses of exudate and cannot be palpated even in narcosis, massage enables us to secure almost ideal relations for the examination; for when the abdominal walls are not too thick, all the pelvic organs can be palpated because, 1st,

after massage the abdominal walls are relaxed, yeilding and non-sensitive, and 2d, the knotty para- and perimetritic masses, adhesions of the ovaries, etc., are dissipated, so that the parametrium becomes elastic and painless. In this wise a diagnosis of salpingitis may often be made where otherwise no definite results could be obtained even during narcosis, and where there was, perhaps, no suspicion of tubal diseases.

Such, in outline, is the Brandt method of gymnastic massage. Of the inventor and his method we find, for the most part, extremely flattering accounts, particularly in the German current literature. Prof. Schaŭta, for instance, says that "Brandt is a complete master of gynecological diagnosis. I was astonished at the minuteness and accuracy of his diagnosis."

On the other hand we have, naturally enough, unfavorable reports and accounts of unsuccessful cases treated by Brandt's methods. It is unnecessary, of course, in connection with a comparatively novel and strange method of cure to point out the causes of failure; but it should be observed that Brandt himself is adapted both by nature and art for the successful pursuit of his methods. He is endowed with great muscular strength, and has an unusually powerful hand with fingers of exceptional length.

It has been objected to Brandt's methods, that they are rude and harsh; but those who have seen him at work and who have had the best opportunities to judge, do not seem to so regard them. Other objections are the length of time required in the manipulations, which will of course prevent many a busy practitioner from applying the treatment which, nevertheless, cannot readily be relegated to assistants; for all are agreed that the greatest diagnostic skill is an absolute prerequisite to successful practice in this line.

It may readily be understood that the treatment is disagreeable alike to patient and practitioner; but it is to be remembered that some of the greatest triumphs have been witnessed in cases that had proved not amenable to any other forms of treatment, short of radical operations of a surgical nature.

If female gynecologists shall prove to have the necessary physical requirements for the successful employment of the methods in question, it will doubtless afford them a wide and profitable field of useful labor.

EDITORIAL NOTES.

HOME.

THE AMERICAN EDITORS' MEETING.—Our editorial confrères are reminded that the annual meeting of the American Medical Editors' Association will be held in the Casino, Newport, R. I., on the Monday evening preceding the meeting of the American Medical Association. The title of the President's Address will be "Our Duties as Journalists and the Reforms which we should Persistently Advocate." This meeting is open to every editor or member of the editorial staff of any regular medical journal in the United States and Canada.

A CASTOR OIL TRUST is being formed, and the preliminary work has been completed. There are seven castor oil mills in the country and the business is profitable. The mills to go into the combination are the Collier and Brown and Kansas, of St. Louis; the Belleville Oil Co., of Belleville, Ill.; Baker and Burke, of New York, and a concern at Memphis. There has been a pool in existence for years, but the business is so profitable that new capital is finding its way in, and the object of the trust is to regulate competition and control the outputs.

DR. H. W. ROSE, member of the Rhode Island State Board of Health has been succeeded by Dr. Herbert J. Pomeroy.

THE PHILADELPHIA MEDICAL MISSION treated 3,220 cases last year, and held 1,017 meetings.

DR. JEROME COCHRANE, State Health Officer of Alabama, has been making a tour of investigation through South Florida and Havana, and reports that he found very few cases of yellow fever at Havana, and only one case in Florida.

DIPHTHERIA.—Dr. John Irving, in the *British Medical Journal*, supports the view that "huge collections of decaying vegetable matter," such as stable manure, may, by disturbance, generate the disease, and cites several cases to prove his assertion.

THE COMMITTEE OF ARRANGEMENTS.—The Association were exceedingly fortunate in the selection of Dr. H. R. Storer, as Chairman of the Committee of Arrangements. The Committee are also indefatigable in their efforts to formulate such plans as will inure to the comfort and entertainment of the members of the Association.

The *Newport Observer* says: "They (the Committee) have had much to contend with, but it looks now as if hereafter there will be smooth sailing. Every one will hope so, and also hope that their efforts may be crowned with success."

THE DEARBORN OBSERVATORY, recently erected at Evanston, Ill., in connection with the new Astronomical Department of the Northwestern University, and containing the great equatorial, known as the Dearborn telescope, was dedicated last Wednesday with appropriate ceremonies. The building cost $25,000, and was donated by Mr. James B. Hobbs, of Chicago.

FOREIGN.

THE JUBILEE MEETING of the Irish Medical Association was held in the College of Surgeons at Dublin, on the 3d inst.

THE *British Medical Journal* in its issue of June 1, presented its readers with a fine engraving of the statue of Queen Victoria recently unveiled by the Prince of Wales in the Medical Examination Hall on the Thames Embankment.

A TYPHOID COMMISSION IN INDIA.—A commission has been appointed to inquire into the causes of the excessive prevalence of enteric fever among young European officers and soldiers. At present, there appears a consensus of opinion to the effect that sewage contamination is the *fons et origo* of the mischief.

SMALL-POX IN INDIA.—A serious outbreak of this dread disease is reported from Belgaum. There are 120 cases, and the vaccinators are hard at work.

A NEW HOSPITAL FOR BOMBAY.—The foundation stone of the Bomanji Edulji Allbless Obstetric Hospital was recently laid by the Governor. Dr. Edith Pechey is to preside over the destinies of this new hospital.

THE ROYAL COLLEGE OF SURGEONS AND ITS MEMBERS.—The branches of the British Medical Association are supporting the demands of the members for reform by passing the following resolutions:

1. "That this meeting sympathizes with the desire of the Royal College of Surgeons of England to take part in the management of the affairs of the College."

2. "That this meeting strongly approves of the reform of the Royal College of Surgeons of England."

The *Provincial Medical Journal* advises the members not to allow the resolutions to remain a dead letter, but to seek the coöperation of Members of Parliment in their respective districts.

HOSPITAL FOR MEDICAL STUDENTS AT VIENNA.—*Le Progrès Médical* states that a society has been formed in Vienna to provide for the comfort of students who are ill. A hospital is about to be established for their accommodation.

AN INTERNATIONAL CONGRESS OF THERAPEUTICS AND MATERIA MEDICA will be held in Paris, from August 1 to 5. It is open to all medical men, chemists and veterinary surgeons who send in their names and a fee of ten francs. There will be two Sections—one devoted to therapeutics, the other to materia medica. Amongst other questions the following are set down for discussion: 1. Antithermia and analgesic remedies. 2. The antiseptics best adapted for each species of pathogenic microbe. 3. Cardiac tonics. 4. New vegetable drugs recently introduced as therapeutic agents. 5. Uniformity of weights and measures employed in formulæ, and the utility of an international pharmacopœa.

THE PERILS OF BOOK REVIEWING were exemplified in a suit brought in a London court about a month ago, against the publishing firm of MacMillan & Co., for an alleged libel consisting of a review of Dr. Herbert Tibbits' work on "Massage and Allied Methods of Treatment" which appeared in *Nature*. The review was a caustic one, and in it occurred this sentence: "Any one even slightly acquainted with the subject will at once perceive that its writer, while professing to teach massage, has not mastered the first principles of the subject." The plaintiff claimed $5,000 damages. The jury awarded him one farthing; and the judge refused him his costs.

THE SANITARY CONDITION OF NAPLES.—Active measures were inaugurated last Saturday, in which the King and Queen of Italy assisted, for improving the sanitary condition of Naples. The poorest districts of the city, where the cholera epidemic of 1888 made such ravages, will be thoroughly renovated. Seventeen thousand houses will be demolished, new streets erected, and the main street will intersect the district which now contains the most pestilential dwellings. It will take ten years to complete the work.

ASSOCIATION NEWS.

Notice to Exhibitors. Correction of Errors.

In THE JOURNAL of June 1st, page 783, there was an inadvertent use of a circular copy containing errors and which was superseded many weeks ago. If our Committee had been advised that there was to be a publication of the matter in the pages of THE JOURNAL we would have provided correct copy. In the document as published "$19.00" should be made $23.75, and "$20.00" should be $25.00.

C. A. BRACKETT,
E. P. ROBINSON,
Sub-Committee on Exhibits.

SOCIETY PROCEEDINGS.

Medical Society of the District of Columbia.

Stated Meeting, January 30, 1889.

THE PRESIDENT, CHARLES E. HAGNER, M.D., IN THE CHAIR.

DR. A. A. HOELING reported the following:

1. GUN-SHOT WOUND OF THE SPHENOID BONE; CASE AND SPECIMEN. 2. GALL-STONES.

Dr. Hoehling asked that the stones be referred to the Committee on Microscopy, as he was not certain whether they were gall-stones or concretions formed by the olive oil which the patient had taken. There being no objection the stones were referred.

DR. J. FORD THOMPSON: The case of gun-shot wound had been thoroughly reported, and there was little left for him to say, unless he opened the whole subject of gun-shot wounds, which he did not propose to do. He had had several similar cases, but death had been almost instantaneous. His last case was that of a young man on 13th street, who put the pistol in his mouth and death was immediate. Whenever the weapon is put into the mouth and fired it is not good surgery to explore the wound inflicted.

DR. LLEWELLYN ELIOT read a paper entitled

THE DIAGNOSIS OF PREGNANCY IN THE EARLY MONTHS.

(See page 867.)

DR. A. H. HOEHLING reported

A CASE OF GUN-SHOT WOUND OF THE SKULL MADE WITH SUICIDAL INTENT.

On December 16, 1888, there was admitted to this hospital, John H. L., a private in the U. S. Marine Corps, aged 42 years, native of Pennsylvania; enlisted in Washington, D. C., on Dec. 7, 1888, for the third time.

Diagnosis.—Vulnus sclopetarium.

Origin.—Self-inflicted, and therefore not in the line of duty. The patient was discharged on the expiration of his second term of enlistment, about twenty hours before he reënlisted, as above stated. He had been on duty at League Island, Philadelphia, and his discharge took place there. He went on a spree and was robbed of the savings of five years while intoxicated, so he came here to begin life again as a private, having last been a sergeant. His descriptive list states that he had slight cardiac hypertrophy, and we found a small goitre, with decided exophthalmos, which latter was noticed by others before he shot himself. He had never been sociable with his messmates, but had one or two intimate friends among them, and was regarded as a good soldier, faithful on duty. He admits having carried the cartridge which he used for over two years in his pocket, with some vague notion, probably not well defined to himself. There is a rumor that he once jumped overboard, but I have not traced it to confirmation. He attributes his present attempt to mental depression consequent on the abuse of liquor, and the loss of all of his money, about $250, for which he stood many a weary watch on board ship in distant seas, and amid the swamps of the League Island Navy Yard. At the latter place he was much exposed to malaria, and had there suffered from the same. On admission to the hospital, at 8:15 o'clock, A.M., the patient was in a state of profound shock, pulse rapid and almost imperceptible at the wrist; respiration slow and labored; surface cold and blanched. Blood was oozing from his nose and mouth, and he had the appearance of having lost considerable blood. Whiskey, as well as ammonia, were at once given by the mouth and hypodermically, also ergotine, atropia sulph. et morphia sulph. hypodermically; ice was placed in his wounded mouth and hot bricks to his surface, to produce reaction, which latter was also hastened by hypoderms of sulphate of sparteine, and carbonate of ammonia by the mouth. In about an hour the patient had revived sufficiently to allow an examination of the injury. He said that he had used a Springfield rifle, charged with a "practice cartridge," which contained 5 grains of powder and will carry 100 feet with precision. In addition to the ball already in the metallic cartridge he placed two more bullets in it; he then fastened a loop to the trigger, put the muzzle in his mouth, and with his foot in the loop fired the gun off.

Dr. H. T. Percy, U. S. Navy, who was the patient's immediate medical attendant, on examining the mouth found a penetrating wound in the median line of the roof of the mouth, 1¼ inch in length, involving the hard and soft palates and extending through the posterior portion of the septum narium. The four upper incisor teeth had been knocked out and the gums back of their

alveoli torn up for the distance of ⅜ of an inch; the dorsum of the tongue was slightly lacerated. As he had already been probed, without success, and hæmorrhage was feared, because of the proximity of the wound to the internal carotid arteries, the probing was not then repeated. There was not a symptom indicating injury involving the the brain at this time, nor for twelve days more, so it was supposed that the bullets must have been stopped by the thick bone of the basilar process of the occipital, the amount of powder used having been too small to drive the lead through. The oozing of blood had now become slight, his respiration remained labored, phonation very imperfect, mind fairly rational, but a little cloudy. At 3 o'clock, P.M., reaction was progressing slowly, hæmorrhage under control; considerable trouble in swallowing, the food passing up into his nose; a good deal of œdema of the soft palate; can only speak in a whisper.

Treatment of a sustaining character; milk and whiskey given both by the mouth and by enema, ice kept in his mouth to retard local inflammation, as œdema of the glottis was feared. The wet condition of mouth and throat, however, had prevented much burning from the sudden flame, just as one can place a wet hand in a flame for an instant with impunity. I am surprised that the excitement of committing suicide did not dry up his salivary glands, as we know the emotion of fear will do, but perhaps he was not afraid; at all events his tissues did not appear to be much damaged by fire and the œdema of the velum pendulum palati was due to the contusion and wounds caused by the explosion and the projectiles. In the evening his temperature was taken and found to be normal.

December 17th. Patient passed a restless night; deglutition very difficult, respiration labored, owing to swelling of the soft tissues around the glottis. Mouth and nose sprayed with solution of boracic acid; hot flannels to outside of throat; ice in mouth; morphia sulph. hypodermically *pro re nata*; diet: milk, eggs, and milk-punch. Evening: temperature 99.4° F.; he had quinia sulph., 0.60, at 4 o'clock, P.M.

December 18th. Rested better last night; less difficulty in swallowing and breathing; discharge from nose and mouth very offensive, for which used solution of sodii chlorinatæ, with sponge and atomizer. Apparently doing well, continue general treatment already indicated as to diet and medicines.

December 20th. Morning temperature 101.8° F. Evening temperature 103° F. In other respects the patient appears to be doing well. He swallows with ease, respiration not materially affected, mind clear, speech improved; considerable offensive discharge from the nose. Treatment: supporting; cleansing and disinfection of the wound and its vicinity; ice *ad libitum*, as he is fond of it, and morphia sulph. hypodemically *pro re nata*.

December 25th. Doing well, apparently; range of temperature has been from 99.6° to 101.6° F. Discharge from mouth diminished, but still offensive, and smells like necrosed bone; the wound of soft parts of the palate has a healthy look, the slough having been thrown off; the wound of tongue and gum healing kindly; tongue coated with a brownish fur; fever, of septic origin, continues. Continue general treatment as before.

December 28th. Condition about the same; fever higher at times than at last entry; palate wound not looking so well; when the wound was dressed this morning a small piece of bone was removed, supposed to be from the horizontal plates of the two palate bones. To-day he complains of headache, so we may date his brain symptoms from this time, as they did not again leave him. Continue general treatment and apply ice-bag to occipital region; he has had quinia sulph. at various times for his septic fever, and symptoms have been met as they arose with appropriate treatment, *all* of which it is not considered necessary to fill this paper with.

December 30th. Little change in the patient's condition since the last entry; he seems to be growing weaker, there is more hebetude, palate wound looks unhealthy, with no tendency towards healing, the bone is denuded within reach of the probe; and attempts to examine the wound by means of reflected light by way of the mouth have failed, because the patient is too weak to stand enough manipulation for the purpose, and his mouth is partially closed in a tetanic manner. Diet: milk, milk-punch, and eggnog. Morphia sulph. hypodermically, *pro re nata*, and quinia sulph. 0.30 ter in die. Cleansing the wound is now difficult, as he swallows all the liquids used, as well as his own foul discharges.

January 1st. Hebetude marked; right arm paralyzed; patient failing; he still takes plenty of nourishment and swallows freely; voice indistinct.

January 2. Losing power over the muscles of both sides; he cannot move arms or legs; has lost control of bladder and sphincter ani. He lies in bed perfectly helpless, but can be aroused and made to speak intelligently, but with difficulty; deglutition difficult. It is not easy to cleanse the wound, because he cannot spit at all and swallows the cleansing liquids and all they carry away with them. He still complains of headache. At a consultation to-day, between Dr. H. T. Percy and myself, the wound was probed for the bullets with a Nélaton porcelain-tipped probe, and though we thought we felt one we were not quite sure, and the mark of lead on the probe was not distinct. I now believed the balls to be in the body of the sphenoid bone, but this has since been found to have been a mistake, as

they were discovered after death in the basilar process of the occipital bone, at and *below* its junction with the sphenoid bone. Thinking that the lead was imbedded in necrosed walls of the sphenoidal cells we decided that we would not be justified in attempting to remove them from this dangerous site at this time, when nothing seemed likely to offer a chance of saving him, and any violence would probably kill him while he was undergoing the operation of removal. I wish to say, however, that of late years bullets remaining in the body have been regarded as too harmless altogether, and probing has been given too bad a name since counsel for murderers have learned to make the plea that probing kills their clients' victims, instead of the assassin's ball itself; a happy mean will probably correct both errors. While the patient under consideration was doing very well, we awaited some natural evidence of the location of the bullets as sloughing and exfoliation should proceed, hoping to remove them in good time, or to let them become encysted, and thus harmless. When the symptoms did come on, which showed that the lead was in a situation to do harm to vital parts, they appeared suddenly, and were of such a character that we became convinced no good could then be accomplished by trying to remove the foreign bodies from the neighborhood of important parts, with more or less violence. The diagnosis of meningitis from caries of the sella turcica, due to fracture of that portion of bone by the bullets, was made out at the consultation above mentioned, and then believed.

January 3. Patient sinking slowly; he lies in a comatose state, but can swallow food of a liquid character and stimulants. Respiration principally diaphragmatic, as the intercostal muscles are paralyzed to a great extent. Discharge from nose very slight.

January 4. Failing gradually, no other change to note.

January 5. He appeared to recognize Dr. H. T. Percy this morning when he addressed him decidedly, but lapsed into unconsciousness at once. Temperature 104° F., respirations 60 per minute, pulse 160 per minute; swallows with increasing difficulty.

January 6. Patient lies in a state of profound coma, respirations about 60, stertorous and growing shallow; temp. 102° F., pulse 160 to 180, and very weak. Fed by stimulating nutritious enemata, as he can no longer swallow. 9 o'clock P.M., failing rapidly, no pulse at wrist. Temp. 103° F.

January 7. Patient died at 2:05 o'clock A.M. Temp. at death 103° F. At 2 o'clock P.M. the autopsy was held by Dr. Percy, U. S. Navy, in the presence of Dr. J. Kerr, of this city, Drs. Woolverton and Nash, U. S. Navy, and myself. Eleven hours and fifty-five minutes after death, rigor mortis well established. Body much emaciated, marks of turpentine stupes on chest, they having been used because of dyspnœa and signs of pulmonary affection; one mark of a small abscess on left arm from a hypodermatic injection.

In the centre of the roof of the mouth, extending antero-posteriorly, is an opening about 1¼ inch long by ⅜ to ½ inch wide, involving about ¾ inch of the bony palate and ½ inch of the soft palate; about ½ inch of the posterior portion of the septum narium is gone. The four upper incisors are gone, and the gum is found to be detached from their alveoli. On removal of the calvarium slight adhesions of the dura mater of the left side above the middle fossa were found; from this site pus flowed when the skull-cap was removed. When the brain was removed about 1½ ozs. of clear fluid escaped from the spinal canal. Dura mater normal except over left middle fossa, where it was found congested, and had been detached from the bone at one portion by the burrowing of about ½ oz. of pus, which had found its way from the basilar process and flowed to the left side across the middle fossa and to some distance up the left side of the parietal bone. The membrane over the basilar process was gangrenous; it had a bluish-black color, a foul odor, and was bulged out from its normal position.

The basilar process was found to be fractured and necrosed, and it crumbled under the knife like paper; it was dark-brown and had a very bad odor. On digging into it one ball was found, much flattened in shape, and just under it another, less disfigured. The third ball was almost of normal shape and was found a little lower down than the second one, and on the outside of the basilar process of the occipital bone, below its articular surface for the sphenoid bone. The odor in the vicinity of the inner surface of the basilar bone was that of caries, and the neighboring tissues were broken down and bathed in pus. The adjacent surfaces of the pons varolii and medulla oblongata, as well as their left sides, were covered with pus. The pia mater was intensely congested, but the brain tissue appeared to be normal on being sliced up. The ventricles had less fluid than is usually found in them. Death was due to exhaustion dependent upon general paralysis, which was caused by meningitis following necrosis of the basilar process from the gunshot wound.

The three bullets are herewith presented, as well as a cartridge such as he used, and it is still loaded; also an empty one, and the powder removed from it, 5 grs. in weight; also an unused bullet, which is ⅜ inch in diameter and weighs 138 grs. avoirdupois. The three balls our patient used had a weight of 1 oz. avoirdupois in all. A service charge in one of these cartridges contains 72 grs. of powder and 138 grs. of lead; and a marine who fired one into his mouth during the last war "blew the whole top of his head off," in the words of my informant.

American Laryngological Association.

Eleventh Annual Congress, held in Washington, D. C., May 30, 31, and June 1, 1889.

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SECOND DAY.—MORNING SESSION.

DR. T. AMORY DE BLOIS, of Boston read a paper describing

SOME OF THE MANIFESTATIONS OF SYPHILIS OF THE UPPER AIR PASSAGES,

and exhibited drawings showing the conditions which he had found.

DR. F. H. BOSWORTH, of New York, referred to the necrosis of bone which occurs in syphilitic ulcerations. He did not believe that syphilitic ulcerations extended from one part to an adjacent part. Such ulceration is due to the breaking down of a gummatous deposit, and does not extend beyond the limits of the original gummatous deposit. The necrosis of the bone he held to be due to the interference with nutrition of the bone caused by the original deposit, and that after the breaking down of the gummatous infiltration has taken place, the ulceration is kept up by the necrosed bone, and treatment should therefore be directed to this point. He agreed with the reader of the paper that potassium iodide was to be employed until the disappearance of the lesion, and that mercury should be used subsequently. Operative interference should be postponed until the syphilitic disease was well under control.

DR. C. C. RICE, of New York, said that in these cases there was often cicatrization and contraction above the visible adhesions, so that after the adhesions are freed, the results as regards phonation and respiration are not what would be expected. This contraction in the post nasal pharynx requires to be stretched in order to obtain good results. In regard to operations: in one case where there were adhesions, and where there had been no syphilitic manifestations for many years, he separated the adhesions with the galvano-cautery. The ulceration which followed took on an unfavorable character, and continued to spread despite constitutional and local treatment.

DR. J. N. MACKENZIE, of Baltimore, protested against the too vigorous removal of diseased bone from the nasal passages. It frequently happens that more is pulled out than is desired, and sometimes from dangerous regions.

DR. WM. H. DALY, of Pittsburgh, objected to the use of the galvano-cautery in tissues of the low vitality of syphilitic tissues. He believed that the galvano-cautery was a much-abused useful instrument. He felt satisfied that better results could be obtained in the fauces, in the nose, in the larynx, in any operation by using a sharp cutting instrument, and allowing as free hæmorrhage as is consistent with good judgment. The freer the hæmorrhage within certain limits, the more certain is there to be immunity from septicæmia and rapid union.

DR. CHAS. H. KNIGHT, of Boston, read a paper entitled

NOTE ON THE GALVANO-CAUTERY IN THE TREATMENT OF HYPERTROPHIED TONSILS.

This paper was supplementary to one read two years ago. The galvano-cautery can not be satisfactorily used in young children, and in them the guillotine is preferable. In older children and adults the galvano-caustic point will prove of service. The galvano loop was especially considered. With this the operation can be done at one sitting. The portion removed by the loop does not indicate the real extent of the operation. A portion of the remaining tissue sloughs so that the operation with the loop was better than with cutting instruments. There seems to be very little more pain with the galvano-loop than with the guillotine. The former operation is, however, more disagreeable on account of the odor of burning flesh.

DR. T. A. DE BLOIS, of Boston, had used the electrolytic needle with good effect. Under cocaine, pain of the procedure is very slight. Half a dozen punctures each day will in a short time produce great diminution. This method is used only in adults. In children, the tonsils are very apt to diminish in size without treatment.

DR. C. E. SAJOUS, of Philadelphia, had frequently used the galvano point, but had to make as many as eighteen or twenty punctures in order to obtain satisfactory results. After the second visit the patient expresses very little objection to the operation. The galvano point is useful in the treatment of enlarged tonsils, especially where the density is not great. Here the cicatricial contraction assists in reducing the size.

DR. W. H. DALY, of Pittsburgh, believed that in the normal throat no portion of the tonsil extended beyond the line of the half arches, and in abscision of the tonsil our object should be to restore the throat as nearly as possible to its normal condition. This cannot be thoroughly done with the tonsilotome, but the operation must be completed with the forceps and bistoury.

DR. F. H. BOSWORTH, of New York, could see no reason for treating this condition by means of 18-20 punctures, when the whole trouble could be removed in a few seconds by a very simple operation.

DR. C. C. RICE, of New York, believed that there are few cases in adults where have been frequent attacks of tonsillitis, and the tonsils are greatly congested, where the galvano-cautery is of service.

DR. JOHN O. ROE, of Rochester, read a paper on

THE TREATMENT OF DISEASED TONSILS WHEN UNATTENDED WITH HYPERTROPHY.

The conditions referred to are of marked clini-

cal importance, but their consideration is ignored by writers upon these subjects. The most common form of the disease of the tonsil is hypertrophy, and in children it is rare to find any other form. During adolescence the tonsils may diminish in size, but they do not return to their normal condition. The small tonsils in adults have often followed hypertrophy. This is a point in favor of the removal of enlarged tonsils. The two forms of disease of the tonsil to which attention was called, were, first, chronic disease of the crypts and lacunæ, and, second, fibroid degeneration of the stroma of the organ, the cicatrical form of the disease. The first is the result of chronic follicular catarrh of the tonsil, and is usually associated with chronic follicular catarrh of the pharynx. The treatment of these conditions is important, not only on account of the disease itself, but also because they are the source of recurrent trouble; and may cause reflex symptoms. Local applications are practically useless. The galvano-cautery, which is useful in the treatment of hypertrophied tonsil, may be employed here, but it is not as efficient as it is in the former condition. The treatment *par excellence* is ablation with the knife. The diseased crypts may be laid open and cauterized with chromic acid, or fused with nitrate of silver. Excision is, however, the best plan. It is rarely advisable to attempt removal of the whole mass at one time on account of the adhesions to the pillars. The use of cocaine lessens pain and hæmorrhage. In every instance in which the speaker had employed excision the cure had been perfect, with entire relief from the attendant symptoms.

Dr. H. L. Swain, of New Haven, reported a case in which recurrent attacks of swelling of the lingual tonsil were caused by the presence of hard masses in the faucial tonsil. The attacks were subdued by treatment of the crypts, by cutting into them with the galvano-cautery, and thoroughly cauterizing their interior.

Dr. J. Solis-Cohen, of Philadelphia, had seen many cases of spasmodic cough due to nothing but the presence of these masses in the crypts and lacunæ of the tonsil. These had been found not only in enlarged but also in apparently contracted tonsils. It is sometimes necessary to produce some gagging, so that the posterior portion of the tonsil presents, in order to discover this condition. In enlarged tonsil, the best treatment is probably excision, but in these atrophied tonsils he had pressed the matter out with a blunt scoop, and then applied a simple astringent, consisting of creosote gr. j, iodine gr. j, potassi iodide gr. v to glycerine ℥j. If this does not answer, he cuts the crypt open with scissors, and scrapes them as thoroughly as possible. This affection is not as thoroughly appreciated by the profession as it should be. He had seen cases where cough existing for five, ten, or more years had been permanently relieved by treating this condition.

Dr. Wm. H. Daly, of Pittsburgh, referred to cases in which the patients were really sick, as the result of these lacunæ becoming filled with cheesey matter.

Dr. F. I. Knight, of Boston, described a case of long-continued irritative cough, in which the removal of a cretaceous mass as large as a pea from a crypt of the tonsil was followed by complete cure.

Dr. Samuel Johnston, of Baltimore, referred to three cases in which the collection, instead of consisting of soft, cheesy material, was hard, looking like spirales of bone, and adhered with great intensity. These bodies were not limited to the tonsil, but were also found on the lower part of the fauces and on the post pharyngeal wall.

Dr. Harrison Allen, of Philadelphia, stated that he had referred to this condition in a paper published in 1882. The solid matter is retained in the crypts. This pressure is often produced by the anterior fold. Sometimes the secretion has gotten out of the tonsil, but is still retained behind the fold. More frequently these masses are beneath the tonsil, under an adventitious membrane.

Dr. J. Solis-Cohen, of Philadelphia, reported a case of

SARCOMA OF THE THYROID GLAND.

The case was one of sarcoma of the thyroid gland, with pressure on the right sympathetic nerve; unilatent tonic spasm of the laryngeal muscles; intermittent clonic spasm of the muscles of the opposite side: There was stenosis from the pressure of the tumor. For this tracheotomy was performed. This afforded relief for a number of months. Hæmorrhage occurred twenty months later, but was controlled without much difficulty. Gradually marked disturbance of the two pneumogastrics supervened, and there was great interference with respiration. It was accidentally discovered that any irritation of the mucous membrane of the trachea would relieve the dyspnœa, and at once the lividity of the face would disappear. This effect was readily produced by touching the posterior wall of the trachea with a bent wire, passed through the tracheotomy tube. The patient died of exhaustion.

Third Day—Morning Session.

Dr. C. C. Rice, of New York, read a paper on

SOME UNUSUAL MANIFESTATIONS OF TUBERCULOSIS OF THE LARYNX.

The first unusual manifestation referred to was where syphilis and tuberculosis of the larynx coexist. Here the lesions of one process mark those of the other. Here the prognosis depends upon which is the more active condition. This combination is more common than is generally supposed, and probably some cases of cure of sup-

posed tuberculosis should be placed under this head. A second unusual manifestation is the engrafting on the tuberculous process of a new tissue rendering the diagnosis difficult. This new tissue may be of two forms, either a granulation tissue, or a papillomatous growth. The third condition was adhesive inflammation at the anterior ends of the vocal bands. This must be rare, as the tubercular process shows little tendency to cicatrization and healing. It is liable to occur only when the cords are immovable, and there is general proliferation of tissue. The last condition referred to was one in which the tubercular deposit in one arytenoid was the only manifestation of the disease in the larynx, the remaining parts of the larynx being perfectly normal.

DR. WM. H. DALY, of Pittsburgh, was satisfied from his experience in three or four cases, that in some instances tubercular ulceration of the larynx may be cured. In these cases there was no evidence of syphilitic disease, and in at least some of them, the tubercle bacilli were found. Recovery has followed the use of alkaline sprays and inhalations, with the free use of iodoform. He believed that tuberculous ulceration of the larynx might occur without evidences of tubercular deposit elsewhere.

DR. J. C. MULHALL, of St. Louis, thought that there might be a catarrhal ulceration of the larynx, and that this was a curable condition. He did not think it would be easy to prove that tubercular disease of the larynx was ever primary, although it is sometimes the first sign of the condition. In tubercular ulceration of the larynx he had used pure lactic acid, and had seen the ulceration heal, but he could not say that he had ever seen life prolonged to any appreciable extent.

DR. F. I. KNIGHT, of Boston, had not the slightest doubt that tubercular ulceration of the larynx does get well. He had seen such ulcers heal under alkaline sprays and iodoform, and more especially under lactic acid. He thought that it was possible to have the tubercular disease of the larynx as a primary affection, but in the the majority of cases careful examination will reveal evidences of disease of the lung. He did not regard changes in the respiratory murmur and in respiration as the most important signs of early phthisis. He placed more reliance upon the localized râles which are heard on coughing. In order to develop this sign the patient should not inspire immediately before or after the cough, but should cough after a rest. He had seen but a few cases in which he regarded the disease as primary in the larynx.

DR. W. E. CASSELBERRY, of Chicago, reported a case in which he found catarrhal ulceration of the larynx. These readily healed under cleansing treatment, and there has been no return of the ulceration during a period of two years.

DR. J. N. MACKENZIE, of Baltimore, thought that the question of the possibility of the existence of primary tubercular disease of the larynx had been settled by examinations upon the post-mortem table, where, in a few cases, careful examination of the body revealed tubercular deposit, nowhere but in the larynx. While a tubercular ulceration of the larynx may heal, this by no means indicates the cure of the disease. I have seen the co-existence of syphilis and tuberculosis in the larynx several times, and it is difficult to say which is the syphilitic and which is the tubercular ulceration. The only test is that of treatment. He had never seen what could be called catarrhal ulceration of the larynx. In regard to treatment he thought that more harm than good was produced by the employment of harsh measures. There is a form of ulceration which occurs in the later stages of phthisis, principally near the bifurcation of the trachea, which is probably due to the corrosive action of the sputa.

DR. W. C. GLASGOW, of St. Louis, believed that tubercular ulcers of the larynx were never healed. He had seen cases of ulceration of the larynx heal under treatment, but he did not consider these to be true tubercular ulcerations. These have healed under simple treatment. He had used with great satisfaction during the past two years the peroxide of hydrogen in the treatment of such ulcerations, and under its use there is rapid healing. He did not believe in primary tubercular disease of the larynx. In all the cases that he had seen, there had been more or less disease of the lungs. In true miliary tuberculosis of the larynx he had always found some evidence of disease in the lung, and these cases, he thought, never recovered. He had seen cases of catarrhal ulceration of the larynx.

DR. S. SOLIS-COHEN, of Philadelphia, read a paper on

THE OCCASIONAL TOPICAL USE OF SOLUTIONS OF NITRATE OF SILVER IN THE TREATMENT OF CHRONIC LARYNGITIS.

The cases reported were not due to nasal disease or obstruction; nor were they those in which all topical treatment is unnecessary. Where indigestion, constitutional disease or diathesis have been present, these have received due attention. It was simply of topical applications for the relief of local conditions that he spoke. All have encountered cases of chronic laryngitis, especially in singers, clergymen, lawyers, etc., in which, after all discoverable sources of irritation, local or general, have been removed and approved topical treatment, suited to the individual case, has been faithfully tried for a longer or shorter time, improvement takes place to a certain point and then stops. Perhaps all visible evidences of disease, except an irregular, pinkish striping of the vocal bands have disappeared, or perhaps there would be a faint uniform coloration or may

be only a loss of lustre; but something there would be that persisted and that prevented the patient from resuming with comfort full use of the voice in singing or speaking, or perhaps even in ordinary conversation.

It is in such conditions as these; the last obstinate remnants of the disease, that he had derived considerable satisfaction from the topical use, by sponge, cotton wool or brush, of weak solutions of silver nitrate, about 10 grs. to the ounce, applications being made every day for some two or three days, until some congestive reaction is produced; after that at longer intervals. In the course of treatment, too, in some cases, before reaching the last stage above described, I have found recovery apparently hastened by occasionally substituting stronger solutions of silver nitrate, 40 to 60 grs. to the ounce, for the iodized glycerine, tannin, tar or other routine application. A visible increase in congestion immediately follows the use of the silver solution, but this passes off quickly, and at the next visit great improvement is usually manifested. These applications are made once in about two or three weeks according to circumstances.

Dr. C. E. Bean, of St. Paul, described two cases of

TUBERCULOSIS OF THE TONGUE,

one in a male and the other in a female. In both the disease had made extensive progress when they came under observation, and no operative measures seemed warrantable. In both there was well-marked involvement of the lungs. Death occurred in both cases a short time later. Attention was called to the differential diagnosis between tuberculosis, carcinoma and syphilis. Carcinoma is to be excluded by the absence of glandular enlargement and of the lancinating pains peculiar to that disease. The question of syphilis can only be determined by the history and by the effect of antisyphilitic remedies.

Dr. J. C. Mullhall, of St. Louis, read a paper on

THE LOCAL TREATMENT OF DIPHTHERIA.

The method of treatment which he suggested was based upon the following considerations: 1. That diphtheria is a germ disease. 2. That the specific microbe, in the majority of cases, selects the tonsils. 3. That unless checked by treatment, the colonization of these germs results in local putrefactive changes with subsequent involvement of the general system. 4. That implication of the larynx or of the nasal passages increases the mortality. 5. That the disease is acutely adynamic. It had occurred to him that in this disease it would be better to wash out the throat than to spray it. This is accomplished by means of an ordinary syringe, and in this way the throat can be washed out without difficulty. The patient should be kept in the recumbent position, the head being brought to the edge of the bed. This procedure is repeated every hour during the day, and at no time is a longer period than three hours allowed to elapse. The only solution that he has used has been carbolic acid with compound solutions of iodine. The water is frequently saturated with boracic acid.

The post-nasal space requires careful attention. In every case of diphtheria the nasal cavities should be kept sterile from the first. Where it is certain that the nasal cavities are not affected, the insufflation of a non-irritating, antiseptic powder may be sufficient. Where there is uncertainty or where it is certain that infection has taken place, the nasal cavities are to be washed out with a weaker solution of the same kind, not more than a teaspoonful for each nostril. For this purpose he recommended a small glass syringe with a bulbous extremity to prevent injury to the nose. After cleansing he frequently resorts to solvents, and has obtained the best results with papoid. In laryngeal diphtheria, inhalation is the only practicable method. The inhalation of the vapor from slacking lime should not be forgotten. In several cases of laryngeal diphtheria he had obtained good results by placing the patient in a small room which had been fumigated with sulphur, and by keeping water to which has been added pine tar and turpentine constantly at the boiling point.

Dr. W. C. Glasgow, of St. Louis, believed that diphtheria is a blood disease rather than a local affection, and that the only objects in local treatment are cleanliness, disinfection and loosening of the membrane. One remedy he had used with advantage was the peroxide of hydrogen by spray. It seems to act by lifting up the membrane by the formation of gas. He considered the constitutional treatment as of the most importance, and he thought the bichloride of mercury and benzoate of soda were the most successful remedies. With these he uses very simple local treatment. In the cases of severe local manifestations the method described by Dr. Mulhall would be valuable.

Dr. D. Bryson Delavan, of New York, referred to the value of the bichloride and cyanide of mercury, which he had used for ten years in the treatment of diphtheria.

Dr. W. H. Daley, of Pittsburg, had on previous occasions recommended the use of calomel in the treatment of this affection, and he thought that it was as efficient as a local agent as it was active as a constitutional remedy. He believed that calomel in large and frequently repeated doses—2, 3, 4 or 5 grs. to children 1½ to 2 years of age—exerted a valuable therapeutic effect. He thought that a large part of the effect was from the local action upon the diphtheritic poison.

Dr. Harrison Allen, of Philadelphia, referred to the value of trypsin as a solvent for the diphtheritic membrane.

DR. F. WHITEHILL HINKEL, of Buffalo, read a paper on

SOME MANIFESTATIONS OF LITHÆMIA IN THE UPPER AIR PASSAGES.

The influence of lithæmia and allied conditions upon the upper air passages has received little attention in laryngology, as is shown by the scanty literature extant upon the subject. There is a distinction to be made between distinctly gouty sore throat and that due to lithæmia or some allied condition. The subjects of the latter may never have attacks of true gout, nor irregular manifestations of it—indeed, as a rule, they are not so affected. The term lithæmia is elastic in its application to cases varying from extreme digestive and nervous disturbance to almost normal health; consequently its manifestations in the upper air passages are not sharply distinguished, nor are they typical or pathognomonic. One of the most characteristic manifestations is a patchy or streaked irregular congestion of the mucous membrane of the larynx and pharynx. In the former case a dry explosive cough accompanies, in the latter uneasiness or positive pain is referred to the side of the throat, occasionally extending to the ears. These cases are notably irritated and made worse by stimulant applications. Local sedatives and general antilithic treatment give the best results. Occasionally acute naso-pharyngeal catarrh is a manifestation of an exacerbation of the lithæmic tendency. Alkaline and diluent medication with proper diet give more relief than local treatment. Obstinate relaxation of the nervous plexuses of the turbinated bodies in some individuals appears associated with lithæmia. Such cases stand operative—caustic—applications badly and receive little or no benefit from them. Some of these cases are much improved by antilithics and general hygiene. Others are intractable on account of uncontrollable lithæmic tendencies.

After electing the offcers for the ensuing year (see p. 847) the Association adjourned to meet in Baltimore, the time of meeting to be determined by the Council.

DOMESTIC CORRESPONDENCE.

The Johnstown Disaster—An Appeal from Dr. Irving C. Blaisdell.

Dear Sir:—As a member of the Cambria Medical Society, as well as a member of the American Medical Association, I will report to you the loss of our Society so far as has been positively ascertained up to this date, although some other member may have already reported to you.

Dr. J. C. Wilson, of Conemaugh, an excellent Christian gentleman and for many years well-known in this county, was with his wife and adopted daughter and one servant girl, with home and everything pertaining to it, swept away, nothing remaining to even mark the place of a once happy home. Next is Dr. G. C. Brinkey, of Johnstown, a very able and promising young doctor, a former secretary of Cambria Society. The third is Dr. M. W. Marbourg, of Johnstown, who had been in practice for many years, ocupying the same office with his wife, Dr. Esther L. Marbourg, and who was well known in this section of country, and stood high as doctor, Christian and friend. His death was first reported to me by his wife, Dr. Esther Marbourg, on the Sunday following the flood. It was on the main street of Johnstown, but how different from its former self. The street was packed 30 feet high with every manner of débris, even to a steam engine that had been carried for miles as easily as though it was a block of wood. Cambria Medical Society was represented at the Chicago meeting by Dr. Esther Marbourg, and she is a member of the American Medical Association.

The doctors of Johnstown have lost heavily, not only in lives of friends, but property. One very worthy doctor and wife on the Sunday following the flood, while assisting in alleviating the wants and sufferings of others had nothing left for themselves except the clothing on their persons and a few dollars in the pocket of the doctor, which he generously divided with a brother doctor, left in the same condition, and who a few hours previous, had been counted wealthy, and so on. These are only two incidents among many that chanced to come under my notice.

I trust the loss and sufferings of the doctors of unhappy Johnstown will be brought before the Association when they shall have met in Newport. Very truly,

IRVING C. BLAISDELL, M.D.

Wilmore, Cambria Co., Pa., June 12, 1889.

LETTER FROM NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Fifth Annual Meeting of the Fifth District Branch of the New York State Medical Association—The President, Prof. Wm. T. Lusk, delivers an admirable Address, in which he treats principally on the subject of Rupture of the Uterus and its Prevention and Treatment—Dr. T. M. Manley, of New York, on the Genesis of Tumors—Dr. F. E. Martindale, of Staten Island, reports a Case of Calcification of the Cardiac Left Ventricular Wall—Dr. T. H. Allen, of New York, on Traumatic Pelvic Cellulitis—Dr. J. G. Truax, of New York, on The Treatment of Acute Lobar Pneumonia—Discussion thereon by Drs. Alfred L. Carroll, E. R. Squibb, S. J. Murray and C. S. Wood.

The fifth annual meeting of the Fifth District Branch of the New York State Medical Associa-

tion, recently held in Brooklyn, was characterized by much good scientific work. In his opening address the President, Professor Wm. T. Lusk, congratulated the Branch on its prosperity, and expressed the opinion that the rapid growth in the membership of the Association, the zeal exhibited for the principles for which the organization stands, and the scientific merit of the work performed at these annual gatherings, were all prophetic of a long and useful life.

A considerable portion of the address was devoted to the subject of *Rupture of the Uterus and its Prevention and Treatment*, and coming, as they did, from so distinguished an obstetrical authority, his views were listened to with the deepest attention and interest. The case upon which his remarks were based was one in which the rupture was due to an undilatable condition of the cervix resulting from the presence of cicatricial tissue, and which had never been published. The patient, 33 years of age, was brought late at night to the Emergency Hospital, exhibiting signs of the most severe suffering. Her temperature was 99.5°, her pulse 140, and she was semi-maniacal. This, as far as could be learned, was her second pregnancy. Her first confinement had been a prolonged one, and had been terminated with instruments. The present labor had then lasted about thirty hours. Dr. Lusk was hastily summoned, and on his arrival he found that the membranes had long been ruptured. The uterus was firmly retracted upon the child, whose body was apparently situated in an oblique position with the head directed to the left, and rupture of the uterus seemed imminent. A digital examination showed that no dilatation of the cervix had taken place, and that this fact was due to firm cicatricial tissue situated at the internal os and extending somewhat over the uterine body. With the impending danger of rupture, he decided upon the Cæsarean section; but the woman's cries and importunities to desist at sight of the preparations for the operation led to hesitation, and this hesitation proved fatal.

While the question of operation was under debate she called for a chamber, saying that she wished to pass urine, and when placed upon the vessel began, in spite of every attempt to control her, to make violent straining efforts. Suddenly she fell back unconscious. The pulse was almost imperceptible, and the entire surface of the body became intensely pallid and covered with clammy perspiration. It was evident that uterine rupture had taken place; and the patient, who did not rally, died in about two hours. The autopsy was made by Dr. T. Mitchell Prudden, and he reported that the body of the child was found corresponding to the long axis of the mother's abdomen, with the back directed to the front and the head bent sharply in that direction. There was a considerable quantity of soft red blood-clot in the abdominal cavity, and the rent in the uterus extended obliquely across the uterus from the upper portion to the right side of the fundus. The os internum was lacerated from the previous labor. The upper portion of the cervical canal was narrowed by dense cicatricial tissue, so that its diameter was about 2 centimetres, and the anatomical diagnosis therefore was: rupture of the uterus, with old, firm cicatricial contraction of the cervix uteri.

The case was rare, Dr. Lusk said, inasmuch as the cicatricial contractions were situated at the internal os and the lower uterine segment. Dilatation by incision or other artificial means was impossible. When cicatrices are limited to the lower part of the canal, as is ordinarily the case, the obstacle to the birth of the child is usually removed by the employment of the knife to sever the constricting bands. Again, the case furnished a new illustration of the fact that in spontaneous rupture the laceration is not of necessity confined to the thinned lower uterine segment, as has been maintained by some of the extreme partisans of Bandl's theory. He thought that the early employment of the Cæsarean section or the Porro operation would probably have saved the patient's life; although, at the late period of her admission to the hospital, either procedure would have partaken of the nature of a forlorn hope.

He then proceeded to briefly review the usual mechanism of uterine rupture and the means at our disposal for combating the mischief done. Spontaneous rupture during labor, he said, is not so rare an event that those engaged in busy practice can afford to be ignorant of the means of counteracting the tendency to a fatal result with all the resources of modern science. To Bandl belongs the merit of showing that nearly all ruptures begin in the lower uterine segment. In normal labors, during each pain the fundus and body of the uterus thicken, while the lower segment is stretched and thinned by the ovum or the presenting part of the fœtus. So long as no obstacle is met with which hinders the descent of the ovum or the fœtus this process ends in the conversion of the uterus and vagina into a continuous canal. Ordinarily, in advanced labor, the lower circumference of the body is distinguished from the stretched lower segment by a thickened ridge termed the contraction ring or ring of Bandl; though in easy labors this ring is often but slightly indicated.

When, however, the descent of the fœtus is hindered by any cause, the resistance of the ligaments which hold the uterus in position is overcome by the continued retraction of the fundus and body, and, as a consequence, the contraction ring is withdrawn upward, the lower segment is thinned and, in extreme cases, nearly the entire uterine contents may occupy the distended, passive inferior segment. Under these circumstances

the contraction ring is strongly marked, and may be felt through the abdominal walls above the pubis, or even in the neighborhood of the umbilicus. This movement upward of the contraction ring is limited somewhat by the pelvic and round ligaments and by the direction downward of the abdominal pressure; and, as these restraining agents operate more efficiently in first than in subsequent labors, it is not difficult to comprehend the relative frequency of rupture in women who have borne many children. As a result of the continued retraction of the body of the uterus, the lower segment may become so distended as to form little more than a membranous covering to the fœtus, and the conditions favoring rupture are established. It has been maintained upon theoretical grounds that spontaneous rupture is arrested by the contraction ring, and this is certainly the rule when there has been no art intervention; but the case in question shows that the rule has its exceptions.

Undoubtedly the popularization of Bandl's teachings has contributed greatly toward the adoption of an intelligent prophylaxis in difficult labors. The situation of the contracting ring, which, when well defined, can usually be felt through the abdominal walls, furnishes in many cases an index of the degree of the threatened danger. The risks are further increased in cross births, in hydrocephalus of the child, and in lateral and anterior displacements of the uterus, owing to the augmented pressure exerted nnder such conditions upon a limited portion of the already over-distended tissues. If rupture occurs under these circumstances the accoucheur cannot wash his hands of responsibility. He ought to know that the faulty uterine positions should have been early corrected by judicious bandaging, the hydrocephalic head reduced by puncture, and that, in all forms of obstructed labor, there comes a time when patient waiting ceases to be a virtue and active intervention is demanded. The new learning teaches us that when the uterine efforts have proved unavailing to fix the presenting part, and the increasing distance of the contracting ring from the pelvic brim points surely to a dangerous thinning of the uterine muscle, the physician must promptly decide upon the indicated measures of relief. These, in head presentations, are version, craniotomy and the Cæsarean section. In neglected shoulder presentations only cautious attempts at version are justifiable, and the operator should never forget to support the head with one hand through the abdominal walls in such a way as to relieve the strain upon the over-distended tissues. In case of failure the persistent use of rude force is criminal.

Dr. Lusk stated that he dwelt upon these points for the reason that he did not believe that rupture of the uterus is by any means as rare as statistics would seem to indicate. While, however, insisting upon a rule of personal accountability as regards the accoucheur, he said it was necessary to recognize that to Bandl's scheme there are exceptions. Now and then cases are reported in which primary rupture has occurred in the fundus and in the body, and where the lower segment has given way without antecedent signs or warnings. Having mentioned such a case in his own experience, he went on to say that rupture may be complete or incomplete. In the latter the tear is confined to the muscular structures, and the peritoneum remains intact. In most instances the hæmatoma resulting from the bleeding vessels dissects up the peritoneum for a certain distance beyond the tear. In the complete form the peritoneum likewise gives way, but to a less extent.

When the shock, the sudden stoppage of the uterine pains, the recession of the presenting part, the bloody discharge, the lateral tilting of the fundus, or its apparent disappearance in the case of the passage of the entire child into the abdominal cavity, have led to a diagnosis of rupture, the first indication for treatment is the speedy removal of the child. In selecting the manner for accomplishing this the important consideration to be kept in view is that it shall to the least possible extent increase the dimensions of the rent. In general terms he said it might be stated that with an undilated cervix, or in cases of extreme pelvic contraction, or after the passage of the head and arms through the rupture, and in all cases where the child passes entirely into the abdominal cavity, laparotomy is the more conservative measure. There is not only less shock, but the opening of the abdomen enables the operator to remove effused blood and amniotic fluid from the peritoneal cavity. Still, the not uncommon impression that the ruptured uterus furnishes a promising field for abdominal surgery does not take into account that, in many of the cases where laparotomy is clearly indicated, the patient is practically moribund.

The employment of the suture to close the uterine wound, in view of recent Cæsarean successes, seemed reasonable; but it was to be borne in mind that with ragged borders infiltrated with blood, with the peritoneum stripped off, and sometimes with air infiltrated into the subperitoneal connective tissue, the conditions for version are in no way comparable to those which exist in Cæsarean section. The Porro operation, he thought, promised better results, though the deep situation of the tear would make it difficult to secure a healthy pedicle. There should, however, be no hesitation about suturing the peritoneal surfaces; as the rupture is thus converted into an incomplete one, with its more favorable prognosis.

When the child could be removed by the natural passages without increasing the extent of the rupture, and when the latter was confined to the lower segment, he considered laparotomy of doubt-

ful value. In many such cases recovery, as far as life was concerned, had been secured by the employment of antiseptic irrigation and filling the gap with antiseptic gauze. At the same time drainage should be secured by means of iodoform wicking or the bent rubber tube; both drainage and packing being most effective when the tear is situated in the posterior wall. This plan of treatment is, of course, only useful where no infection of the abdominal cavity has taken place at the time of the rupture, and the best results are obtained, therefore, in cases of complete rupture. At the same time that drainage is used, compression of the fundus and body should be employed by means of the hands through the abdominal walls, and in case of hæmorrhage efficient aid can be furnished by pressure made upon the aorta. Finally, a carefully graduated compress should be placed around the uterus in order to maintain firm contractions. For this purpose he prefers the disc-shaped hydrostatic bag, partially filled with water; and in this condition and in all forms of post-partum hæmorrhage he has found it most effective.

Dr. Lusk also reported for the first time an interesting case of Cæsarean section, which unfortunately terminated fatally. The patient had a contracted pelvis and kyphosis, with an abscess from which there was a large accumulation of pus under the psoas muscle, and he expressed the opinion that if in this instance he had performed the Porro operation, and thus by removing the uterus relieved the pressure upon the intestines and other structures, the patient's life would have been saved.

The first regular paper was an elaborate one by Dr. T. M. Manley, of New York, on *The Genesis of Tumors;* after which Dr. F. E. Martindale, of Staten Island, read the *Report of a Case of Calcification of the Cardiac left Ventricular Wall, following Subacute Vernicose Endocarditis.* The patient, a man 73 years of age, was suddenly attacked, April 13, 1886, with intense pain in the precordial region, accompanied by cold perspiration and dyspnœa, with a sense of impending dissolution. Dr. Martindale first saw him on April 15, when he made a diagnosis of subacute endocarditis, with circumscribed pericarditis at or near cardiac base. The etiology was obscure, as there was no history of either acute or chronic rheumatism, or nephritis, or of any exanthematous disease since childhood. From a careful inquiry into the previous history of the patient it was learned that in June, 1873, he had had a somewhat similar attack of cardiac trouble, though the exact nature of it could not be ascertained. He improved satisfactorily under treatment, but May 3d there occurred an embolic infarction of the right radial artery, and it was several months before the effects of this entirely passed away. Subsequently the patient had two attacks of marked dyspnœa, with pain in both legs and œdema of the feet and ankles. By August 1st his general health and the distressing symptoms from which he had been suffering were greatly improved; but the auscultatory signs pointed to a chronic mitral insufficiency, and it was now clear that even should he survive for any length of time. he would labor under a permanent cardiac disability, with more or less remote compensatory hypertrophy and dilatation, and the functional disturbances resulting therefrom. In December œdema of the feet reappeared, and by the following July the œdema had extended to the middle of the thighs and implicated the scrotum and prepuce, while dyspnœa had again become so serious as to render the recumbent position impracticable. By the middle of September the anasarca had become general, and October 23d the patient died from œdema of the lungs.

At the autopsy the apex of the heart was found to be drawn backwards and firmly attached to the middle lobe of the left lung; the adhesions involving the two layers of pericardium and pleura. The left ventricular wall had undergone calcareous degeneration, and was very thin at this point. There was considerable hypertrophy and dilatation, but no valvular lesion was found, with the exception of a single tendinous spot on one of the mitral folds, if that could be regarded as such. The original diagnosis was at fault, therefore, only in attributing the apex murmur to a mitral stenosis, rather than to a roughened and unyielding endocardial surface.

In reviewing the history of this case, Dr. Martindale first put the inquiry, Was the initial attack in 1873 an endo- or pericarditis, and to what degree were either or both attacks concerned as factors in the subsequent calcification? Although the history did not make this apparent, he said, there must have been an etiological factor behind the first attack, since all authorities agree that primary iodiopathic pericarditis is of extremely rare occurrence. In regard to primary endocarditis, also, there is absolutely nothing of a positive character known. We were therefore forced to the conclusion that the cardiac disability of 1873 must have had its origin in either a rheumatic or an exanthematous lesion at so early a period in the patient's life that it produced no permanent impression. There could be little doubt, he thought, that the first lesion, in 1873, was a circumscribed pericarditis, with a possible implication, to a limited extent, of the muscular tissue of the heart. Upon a careful examination of the specimen he said it could be seen that the endocardial surface of the calcified ventricular wall was smooth and polished, while the myocardium was the chief seat of the calcareous deposit; which further tended to substantiate the view that the disability of 1873 started as a pericarditis, but that the myo- and endocardium were not seriously implicated until the recurrence of 1886; for it

was hardly possible that the pathological conditions of the latter date could have existed thirteen years without any subjective symptoms.

For the embolic infarction of the radial artery he said there was needed no more reasonable hypothesis (assuming the myocardial lesion existing at this period to have been a sequence of the secondary pericarditis of 1873), than that the left ventricular pericardium was at this time attached by circumscribed adhesions to the left pleura; its contractile power being restricted not only by this, but by the gradual degeneration of the cardiac muscular tissue as well. The blood current through the left ventricle must have been churned, as it were, by the irregular and imperfect contraction of its normal muscular fibres upon the dense and non-contractile myocardial wall; and from this resulted, no doubt, the formation of a small coagulum and its subsequent location at the seat of radial infarction. As to the possible agency of sepsis in the causation of cardiac embolism, as illustrated in this case, Dr. Martindale, after referring to several modern authorities, stated his conviction that it was clear that nothing positive could be affirmed regarding sepsis as an etiological factor in the remarkable tissue metamorphosis observed in this specimen.

The last paper of the morning session was by Dr. T. H. Allen, of New York, on *Traumatic Pelvic Cellulitis*. This cellulitis, he said, was always associated with a unilateral or bilateral laceration of the neck of the uterus, and much more frequently with the former, because this was almost always deeper than the bilateral tear. He did not believe that in every case of laceration the involution of the uterus is arrested, but numerous examples of subinvolution associated with laceration had led him to consider the relation of cause and effect to be positive and direct.

Having reported in detail six cases in which he had performed the operation of trachelorrhaphy with very successful results, he went on to say that it should not be inferred from these that he was prone to operate in laceration complicated with cellulitis. This he would do only in exceptional instances. The opinion of the best gynecologists, he believed, was expressed in the following extract from a paper read by Dr. C. C. Lee, in 1881: "When any decided inflammation exists about the uterus, or so long as any tenderness can be detected in the neighboring connective tissue, it is unsafe to operate." Dr. Bache Emmet, in an article in "The American System of Gynæcology," had, however, remarked: "In other cases the indurated and sensitive angle of laceration will be very marked and easily detected from the first, and in these cases there can be no question as to the necessity of removal of such a foreign body as a cicatrix." In this statement he thought Dr. Emmet had touched the keynote of the treatment; for he believed that this foreign body was the cause of the coëxisting cellulitis. There was a limited class of cases in which the use of copious intra-vaginal injections of hot water and other well directed local as well as general treatment might improve, but not cure, a coëxisting cellulitis. This class of cases broadened the field for trachelorrhaphy, and to it Dr. Allen said he had given the designation "traumatic pelvic cellulitis," to distinguish it from the more diffuse form of pelvic inflammation. It was primarily caused by a wound—a tear—and nature in her unassisted efforts to repair the loss of continuity in the uterine neck built up a structure histologically different from the adjacent tissue, which operated in the same way as a foreign body. The operation of trachelorrhaphy removed the cicatricial tissue and completed the sphincteric arc of the circle with tissue identical in character; while it also had the effect of relieving, by the bleeding caused by it, the congested blood-vessels and lymphatics, and of imparting a new impulse to the process of nutrition. In concluding, Dr. Allen recapitulated his points in the following propositions:

1. Lacerations of the cervix uteri may result in the formation of cicatricial tissue, which produces chronic traumatic pelvic cellulitis.

2. In a limited number of these cases local or general treatment, or both, will not subdue this inflammation and pain.

3. Such treatment having failed, trachelorrhaphy may be performed successfully.

4. The dense mass of cicatricial tissue operates similarly to a foreign body, and its removal by Emmet's operation is a logical remedy which precludes the possibility of its reformation.

At the afternoon session Dr. J. A. Wyeth gave an analysis, with comments, of a number of important surgical cases recently treated by him. They comprised suprapubic lithotomy and other operations upon the bladder, ligation of arteries for various conditions, amputations, and resections of the knee-joint. In regard to suprapubic lithotomy, he said that after a career of varying fortune, in which it was at some times unduly lauded and at others entirely abandoned, he believed this operation had now attained a secure position which, on account of the improved facilities at the command of the modern surgeon, it would maintain permanently in the future. He also mentioned the various conditions in which it was applicable and in which it was, in his opinion, decidedly preferable to perineal section.

After some discussion of Dr. Wyeth's remarks Dr. J. G. Truax read a paper on *The Treatment of Acute Lobar Pneumonia* (see THE JOURNAL of June 29).

Dr. Alfred L. Carroll said that there could be no doubt that in many cases of pneumonia the need of arterial sedatives was manifestly indicated, and of all arterial sedatives venesection was the most powerful. There was, however, in addition

to the two classes of cases mentioned in the paper, a third class in which stimulus was urgently demanded on account of the feebleness of the patient; and which was well represented in the average seamstress of the city, for instance. In the second class mentioned by Dr. Truax there was danger of asphyxia; or, in other words, of the patient's drowning in his own fluid. In such cases he did not think any intelligent physician at the present day was afraid of drawing blood from the arm. The lungs were engorged with blood and the heart's action embarrassed, and vensection did not cure the pneumonia, but simply removed an obstruction. It was not, therefore, to be regarded as a curative; and in many instances other artificial sedatives were sufficient to secure the desired end. When these other sedatives failed it was unquestionably the physician's duty to resort to the lancet. The albuminuria spoken of by Dr. Truax as occurring in many severe cases of pneumonia was an indication of the venous congestion met with everywhere in the system.

Dr. E. R. Squibb inquired whether Dr. Truax had ever used veratrum viride, the old substitute for venesection, which often accomplished what venesection would in cases where the latter was inappropriate. He also asked whether Dr. Truax knew that he could get antifebrin (the use of which was advised in the paper) for half the money if he bought it under its other name of acetanilidine. The name antifebrin had been patented simply for the purpose of making money.

Dr. S. J. Murray said that by giving veratrum viride in doses of from ½ drop to 2 drops every half hour he had never met with any difficulty in reducing the temperature. He was in the habit of carrying the drug to the extent of producing nausea; when he gave Dover's powder, and afterward stimulus, if it was required. Personally he much preferred veratrum to venesection, and he would certainly give it a trial in any case before he resorted to bleeding.

Dr. C. S. Wood said that in former years it was often noted that veratrum viride and antimony had a marked effect if they were administered after the patient had been bled, but did not exert their appropriate action if given before venesection. He was firmly convinced that, in the class of cases described by Dr. Truax, there was nothing that could compare in efficiency with bleeding.

In closing the discussion Dr. Truax said that he entirely agreed with Dr. Carroll that in feeble patients stimulants were demanded, and it was his practice to use them freely whenever they seemed indicated. In reply to Dr. Squibb he stated that he had often tried veratrum viride, but cases were sometimes met with in which neither it or any other agent would take the place of bleeding.

P. B. P.

The Best Climate for Consumptives.

Dear Sir:—It is with pleasure I have read the recent comments in THE JOURNAL, upon the best climate for consumptive patients, and thinking that perhaps the conclusions arrived at after spending nearly a year in this land of sunshine, may, in their humble way be of interest to some members of the Association, I send them to you.

Albuquerque is situated near the head of the fertile valley of the Rio Grande, is nearly five thousand feet above sea level, surrounded by mountains and highlands, which act as barriers against cold winds and blizzards. The soil is a sandy loam, the water pure and good. There being no station of the signal service here, I am unable to obtain a correct record of the temperature. The nearest station is at Santa Fé, two thousand feet higher, and sixty miles farther north. A fair comparison cannot be made. The winter temperature at Santa Fé and Las Vegas is considerable colder than at this point. Imagine the seasons as you have them in Illinois with the months from November 1 to the last of March taken out, and those remaining extended to fill the gap, with no oppressive heat and hot nights, little rain except in August and September, very few cloudy days, a bracing balmy atmosphere, and you have an Albuquerque climate. Twice during the winter the thermometer registered at zero; only three times has snow fallen in the valley, to melt and disappear in a few hours, except once when it remained a day or two in shady places.

The whole winter with these exceptions, has been like one long eastern October, with just enough frost during the night for a tonic. At this altitude the air is pure and stimulating, free from poisonous germs. There is an abundance of good sunshine, and the cool mountains in which to spend a delightful summer reached by a beautiful drive of twelve miles on the mesa.

The improvement in health of many has been almost miraculous. Those narrow chested individuals with a general debilitated appearance, rarely fail to have their chests expand and become strong and robust, at this altitude. Those who come here, in the first stages of consumption, with but a slight softening of the lung tissue will in all likelihood be cured. Those patients with small cavities in their lungs may be sure of being greatly benefited. Where there is extensive tubercular deposit with a large amount of broken down tissue, length of days may be added to their lives; some seem to regain their strength and live for years.

Those patients with a hæmorrhagic tendency, and those in the last stages of consumption ought not to come into these high altitudes too suddenly; they should be sent around by way of El Paso, Texas; slowly working their way up the valley,

until they have reached a locality, where improved health is assured. Patients who come here for their health must come with the expectation of staying four or five years, if not the remainder of their lives. Many that come, are to all appearance cured or greatly benefited, then go back to their old homes in the east, only to have a relapse, returning to Albuquerque when it is too late.

Climate will not do every thing. Too often those who go away from home in search of health, violate all hygienic rules. I have seen invalids, in the name of exercise do that which would make a strong man weary. I have known young men, in the last stages of consumption, spending their time in "riotous living," after leaving home and dear ones, in search of a new lease of life. The physician's duty does not cease with simply advising their patients to make a change in climate. Lay down rules for them to follow, instructing them to take a moderate amount of outdoor exercise, spending as much of their time in the open air as is consistent, enjoying their winter evenings indoors, at some pleasing occupation or amusements that are not debilitating; tell them to forget self; impress upon them that "care to our coffin adds a nail no doubt, and every grin so merry draws one out."

I am often asked: "What effect does the New Mexico climate have upon rheumatic and other diseases?" The larger proportion who come to this region suffering from rheumatism find a complete cure; a few obtain no relief. My theory now is that those who come from the States along the Great lakes, where the air is laden with moisture, will be greatly benefited by a sojourn here, but those from Kansas, Nebraska and States of a dryer clime will not receive the good expected. My opinion may change with time. Many dyspeptics are cured by coming here. Those who are suffering from the moist form of catarrh find great relief. Cancerous troubles are almost unknown.

CHARLES E. WINSLOW, M.D.

Albuquerque, N. M., May 11, 1889.

NECROLOGY.

Dr. Daniel W. Hand.

Dr. Daniel W. Hand, of St. Paul, Minn., died in that city June 1, in his 55th year, of uræmia. Dr. Hand was born at Cape May Court House on the 18th day of August, 1834. He was a graduate of the University at Lewisburg, Pa., and subsequently graduated in medicine at the University of Pennsylvania with high honors. Dr. Hand went to St. Paul in March, 1857, where he practiced his profession until July, 1861, when he volunteered his services and was appointed assistant surgeon to the 1st Minnesota Regiment; he was afterwards, by examination, appointed Brigade surgeon. At Fair Oaks his horse was shot from under him, and he himself was wounded. May 18, 1863, he was captured and lodged in Libby Prison, was, however, soon exchanged and transferred to Newbern, North Carolina, and for two years from August 11, had charge of the medical department of the State. While medical director he rendered important services during a serious small-pox epidemic, which his quick action and stringent hygienic measures effectually checked.

In the month of September, 1864, yellow fever broke out at Newbern; between September 6, and November 1, over 1,200 citizens perished, including eleven of the assistant surgeons. Dr. Hand alone escaped until the epidemic had almost subsided, when he also was stricken down. His recovery was rather a rapid one, but unfortunately left him with the kidney trouble which was the final cause of his death.

In 1865 he was mustered out of service with the rank of Colonel. He soon returned to St. Paul, where he practiced medicine until his death. His death will be lamented by a large circle of friends and patients. The profession loses in him one of its most prominent members. He was always at the head of any undertaking to better the standing of the profession in his State, was for a long time a member of the State Examining Board, for many years President of the State Board of Health, he had the welfare of the people always at heart. He was a member of the American Medical Association. His many kindnesses to the younger members of the profession, his uniform cordiality to the older, and his professional ability, made him the foremost of the consultants of the State.

Scientific, conscientious, affable, energetic, he was an ideal physician honored and beloved by all.

Dr. Ellen A. Ingersoll.

Ellen A. Ingersoll, M.D., was born in Canton, Ill., April 24, 1844. She attended school in her native city until 1865, when she entered Dio Lewis' school at Lexington, Mass., where her interest in the science of medicine was awakened. Her medical studies were begun in 1872 with the late Dr. G. W. Wright, of Canton, and took her first course of lectures at Keokuk, Ia. She entered the Woman's College at Philadelphia, and graduated March 13, 1874, after which several months were spent in the Woman's Hospital of Philadelphia and in the New England Hospital of Boston as resident physician. She returned to her native city fully equipped for practice, and gained the confidence and respect of her colleagues, as well as that of the community at large.

She never failed to respond to the call of suffering and gave freely of her highest powers in administering to the poor. She became a member of the Illinois State Medical Society in May, 1875, and of the American Medical Association three years later, and was appointed several times to represent the State Society in the annual meetings of the Association, and was a delegate elect to the convention of that body this year, 1889. Some papers of great merit were read by her before the Society, and one year she acceptably filled the chair of Vice-President. On Thanksgiving Day, November 29, 1888, she died from heart failure after a surgical operation.

By the death of Dr. Ellen A. Ingersoll the Illinois State Medical Society and the medical profession have been deprived of a most valued member, one whose devotion to its principles and practice was characterized by the highest regard for professional honor. The medical women have lost one of the most noble and gifted of the sisterhood.

C. S.

BOOK REVIEWS.

DISEASES AND INJURIES OF THE EAR. By CHARLES H. BURNETT, A.M., M.D. Philadelphia: J. B. Lippincott & Co. 1889.

This little book of 154 pages is one of a series known as "Practical Lessons in Nursing." It is free from technical terms, and written so as to be perfectly intelligible to the non-professional; containing clear descriptions of the various affections of the ear; their causes, and relations to other diseases, so that they may, if possible, be avoided; but if contracted, their early recognition will prevent experimental and erroneous forms of treatment. Therapeutically its aim has been to show the inexpert what to avoid in the treatment of ear diseases, rather than what they may try to do for their relief. In speaking of diseases of the middle ear, the author has a few good words in regard to the use or rather the abuse of quinine, which is often taken in large doses to abort a "cold in the head." Nothing in fact is more likely to bring on a disease of the ear, which might otherwise escape than large doses of quinine. It causes congestion of the mucous membrane of the middle ear at a time when the predisposition to inflammation in that locality is intensified by the condition already existing. Those portions of work devoted to hygienic management are good.

MISCELLANY.

THE NEWPORT MEETING ENTERTAINMENTS.—Delegates are reminded that the ladies accompanying them are invited to all the entertainments provided. The afternoon entertainments are intended more especially for the ladies, and those delegates who are chiefly seeking mental rest.

Tuesday Afternoon, June 25.—Excursion to U. S. Torpedo Station, Goat Island. By invitation of the commanding officer, Captain C. F. Goodrich, U. S. N. A practical demonstration of the explosion of torpedoes will be given at 4:30 P.M. Lt. J. C. Wise, Surgeon U. S. N., of the Committee of Arrangements, and Medical Officer of the Station, will introduce the visitors. Government steam launches will leave the ferry wharf at 4 P.M., and every few minutes thereafter.

Tuesday Evening, June 25.—Reception at Music Hall, and Celebration of the 250th Anniversary of the Foundation of Newport, under medical auspices, 8:30 to 11 P.M. Dr. Francis H. Rankin, President of the Newport Medical Society, and Secretary of the Newport Board of Health, will preside. Addresses of welcome will be given by Hon. Thomas Coggeshall, Mayor of Newport, on behalf of the citizens; and Dr. Henry E. Turner, President of the State Board of Health, and Ex-President of the Rhode Island Medical Society, on behalf of the Newport profession. (A brief address had been promised by Hon. Francis Brinley, President of the Newport Sanitary Association, but upon June 14, at the venerable age of 89, he has deceased.) An oration will be delivered upon John Clarke (1609–76), the physician, clergyman and statesman, who procured the charter for Rhode Island from Charles II, in 1663, and who has been immortalized as "The Founder of the Civil Polity of Rhode Island," upon the marble slab erected by the Newport Medical Society, at the Historical Society's Hall, by Hon. William P. Sheffield, late of the U. S. Senate. There will be music by the celebrated Fort Adams band, kindly offered by the commanding officer of the Fort. After the addresses the seats will be cleared away, and an informal reception will be held.

Wednesday Afternoon, June 26.—Excursion to U. S. Naval Training School, Coaster's Island. By invitation of Commander F. J. Higginson, U. S. N., in command of the station, a battalion drill of the boys of the school will be given at 5 P.M., and opportunity to inspect the U. S. training ship "New Hampshire." Lieut. J. L. Neilson, Surgeon U. S. N., of the Committee of Arrangements and medical officer of the station, will introduce the visitors. Government steam launches will leave Commercial wharf, north side, at 4 and 4:30 P.M. Those who prefer, can reach the island by carriages, via the causeway at end of Third St.

Wednesday Evening, June 26.—Vocal and instrumental concert at the Opera House, at 8 P.M., under the direction of Dr. T. A. Kenefick, chairman of the Sub-Committee of Entertainments.

Thursday Afternoon, June 27.—Excursion to Fort Adams. By invitation of the commanding officer, Col. John Mendenhall, U. S. A., there will be a light battery drill at 5:30 P.M. Major S. M. Horton, U. S. N., Post Surgeon and of the Committee of Arrangements, will introduce the visitors. Government steam launches will leave Ferry Wharf at 4:30 and 5 P.M. The fort can be reached, if preferred, by carriage.

Thursday Evening, June 27.—Promenade concert, and reception by the Newport profession, at the Ocean House at 8 P.M. Music by the band of U. S. ship "New Hampshire," kindly offered by Commander Higginson, U. S. N., for the occasion.

Friday Afternoon and Evening, June 28.—Excursion upon Narragansett Bay, and clam-bake, at the invitation of the Rhode Island Medical Society. Dr. John W. Mitchell, of Providence, President of the State Society, will receive in behalf of the hosts of the festival, and will bid God-speed to the parting guests.

LAKE COUNTY (ILL.) MEDICAL SOCIETY.—The Sixth Annual Meeting of the Lake County Medical Society was

held Thursday, June 6th, in the Waukegan Court House, the profession of the county being well represented. Dr. Tombaugh, the retiring President, gave an interesting address upon "The Use of Opium in Labor," which was followed by a general discussion. Dr. Carter reported as delegate to the Illinois State Medical Society. The following officers were chosen for the ensuing year: President, Dr. Wm. Sweetland, Highland Park; Vice-President, Dr. F. C. Knight, Libertyville; Secretary, Dr. A. C. Haven, Lake Forest; Treasurer, Dr. Beatrice Pearce, Waukegan. Drs. Beatrice Pearce, Marie F. Barry, J. M. G. Carter and F. C. Knights were chosen to read papers at the next session of the Society, the first Thursday in September.

OBITUARY.—Dr. James Ethelbert Morgan died recently at his residence in Washington, D. C., aged 64 years. Dr. Morgan was a native of St. Mary's County, of the old Maryland family of that name, and was a graduate of Sangston College. Dr. Morgan, shortly after his graduation over forty years ago, settled in South Washington, when that portion of the city was but a few hamlets united only by pathways across the commons, and it may be said he grew up with that section. He represented the old Seventh Ward several years in the Council and served a number of terms on the Board of School Trustees, and was for some time an active member of the old Board of Health. In his office he had as students Dr. C. V. Boarman, Ham, Leech, S. P. Fenwick and others, who succeeded to his South Washington practice when he moved to his late residence on E street, some ten or twelve years since. He also has three sons in the profession.

Dr. Morgan made no pretensions to that kind of charity which is seen of men, but the recipients and his intimate friends know that quietly he did a great deal to relieve suffering outside of his medical duties. Like Dr. Borrows, the deceased took much interest in local military affairs. The doctor was greatly loved, and his death is universally regretted.

DANGERS FROM CONSUMPTIVE FELLOW-TRAVELERS.—In the *Illustrated Med. News*, March, 1889, p. 294, attention is drawn to the danger run from traveling with consumptive patients. There is strong evidence that on board ship it is very easy for husband and wife to communicate the disease to one another. It is even possible for a healthy person to become consumptive if sharing the same cabin as anyone known to have the disease. On board ship there is often a great deficiency of fresh air, and the cabins are badly ventilated, to say nothing of the danger of taking the poison from the upsetting of utensils which contain sputum. The danger of traveling with infected fellow-passengers in a railway carriage or public conveyance may be so infinitesimal as practically to be neglected, yet when one is brought into contact with an infected individual for a considerable length of time, and more especially when the air which the infected and non-infected individuals are forced to breathe is neither large in quantity nor good in quality, the danger is undoubtedly a real one, and it is to be hoped that means will be taken to prevent the spread of so fatal a disease in this manner.

LETTERS RECEIVED.

Dr. J. Edwin Michael, Baltimore; Dr. J. Llewellyn Eliot, Washington; Dr. J. G. Truax, New York; Miss Emma Carter, Waukegan, Ill.; Dr. J. Block, Kansas City; S. M. Horton, Surgeon U. S. A., Fort Adams, R. I.; H. Soule, Ann Arbor, Mich.; Dr. Augustus P. Clarke, Cambridge, Mass; Dr. L. Bremmer, St. Louis, Mo.; Dr. Chas. Stover, Amsterdam, N. Y.; Dr. R. J. Dunglison, Philadelphia; Dr. D. J. Bell, Fort Fairfield, Me.; Dr. G. K. Dickenson, Jersey City, N. J.; Dr. J. A. Dibrell, Jr., Little Rock, Ark.; Dr. R. F. Price, Cleveland, Ohio; Dr. Frank S. Billings, Lincoln, Neb.; Mrs. A. E. Goodwin, Rockford, Ill.; Dr. C. A. Brackett Newport, R. I; Dr. Geo. E. Hubbard, New York; Singleton, Bonnell & Co., Chicago; Dr. H. N. Buckley, Delhi, N. Y.; Dr. Louis J. Lauterbach, Philadelphia; Dr. S. P. Ziegler, Carlisle, Pa.; Dr. W. S. Leffmann, Philadelphia; Dr. R. C. Stockton Reed, Cincinnati; Dr. T. E. Potter, St. Joseph, Mo.; Dr. A. Guthrie, Cairo, Ill.; Dr. C. L. Knapp, Mt. Vernon, Mo.; W. P. Cleary, New York; M. W. Knight, Melford, Mass.; Dr. H. M. Bracken, Minneapolis; Dr. N. P. Stair, Fort Atkinson, Wis.; Dr. A. B. Sloan, Kansas City, Mo.; Dauchy & Co., New York; Rio Chemical Co., St. Louis; Thos. F. Goode, Buffalo Lithia Springs, Va.; S. S. White Dental Mfg. Co., Philadelphia; Dr. Thos. H. Manley, New York.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department, U. S. Army, from June 8, 1889, to June 14, 1889.

By direction of the acting Secretary of War, First Lieut. Philip G. Wales, Asst. Surgeon (recently appointed), will proceed from this city to the Presidio of San Francisco, Cal., and report for duty to the commanding officer of that post, reporting also by letter to the commanding General, Division of the Pacific and Dept. of California. Par. 3, S. O. 132, A. G. O., June 8, 1889.

Capt. Charles M. Gandy, Asst. Surgeon, upon the abandonment of the post of Ft. Concho, Texas, will report in person to the commanding officer, Ft. Clark, Texas, for duty at that station, to relieve First Lieut. Ogden Rafferty, Asst. Surgeon, reporting also by letter to the commanding General Dept. of Texas.

Lieut. Rafferty, on being relieved by Capt. Gandy, will report for duty to the commanding officer, San Antonio, Texas, reporting also by letter to the commanding General Dept. of Texas. Par. 7, S. O. 133, A. G. O., Washington, June 10, 1889.

Official List of Changes in the Medical Corps of the U. S. Navy for the Week Ending June 15, 1889.

Asst. Surgeon O. D. Norton, ordered to the Naval Hospital, Chelsea, Mass.

P. A. Surgeon J. H. Hall, detached from the Naval Hospital, Washington, D. C., and granted six months' leave to go abroad.

P. A. Surgeon D. O. Lewis, detached from the Naval Academy and to Hospital, Washington, D. C.

Surgeon Geo. A. Bright, detached from the Navy Yard, Norfolk, Va., and wait orders.

Surgeon R. A. Marmion, detached from the receiving ship "Franklin" and to Navy Yard, Norfolk.

Surgeon D. N. Bertolette, ordered to the receiving ship "Franklin."

Medical Inspector B. H. Kidder, ordered to the Naval Academy, Annapolis, Md.

Medical Inspector T. C. Walton, detached from the Naval Academy and to the U. S. S. "Chicago."

P. A. Surgeon H. G. Beyer, ordered to the training ship "Portsmouth."

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine-Hospital Service, for the Two Weeks Ending June 8, 1889.

P. A. Surgeon F. W. Mead, ordered to examination for promotion. May 31, 1889.

P. A. Surgeon P. M. Carrington, to proceed to Johnstown, Pa., on special duty. June 3, 1889.

P. A. Surgeon W. P. McIntosh, when relieved at New Orleans, La., to proceed to San Francisco, Cal., for temporary duty. May 29, 1889.

Asst. Surgeon A. C. Smith, relieved from duty at Louisville, Ky.; ordered to Marine Hospital, New Orleans, La. May 29, 1889.